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# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

JANUARY, 1930

No. 1

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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HENRY HANSON, M. D., STATE HEALTH OFFICER

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## ADMINISTRATION

Henry Hanson, M. D., State Health Officer

### ECHOES FROM THE BOARD MEETING

The meeting of the State Board of Health held on the morning of December 9th had an additional significance for the Secretary because of the fact that just twenty years ago on the morning of December 9th he took up his first duties with the Florida State Board of Health in the capacity of Director of the Laboratory. It is curious that in a measure the State Board of Health finds itself in a condition similar to that of twenty years ago in having outgrown its quarters. The growth in activities has kept pace with the growth of the State, even though there has not been a corresponding provision of space to enable the staff to work with maximum efficiency. At that time our Venerable State Health Officer, the late Dr. Joseph Y. Porter, realized that there was a great future for the state and adopted a program of health conservation to which end he planned and built the present building and established branch laboratories at strategic points in conformity with the transportation facilities as they could then be foreseen. Under his wise guidance the work prospered and his staff grew, first by additions to the Field Staff, the antecedent of the Bureau of Communicable Diseases, then the initiation of public health nursing, first in the nature of tuberculosis nursing soon to be followed by the establishment of a section of Vital Statistics and later the employment of a Sanitary Engineer.

The different activities enumerated above are now developed into Bureaus, each with its Director. The advance in Public Health activities throughout the country places an increasing demand for skilled and trained workers, and for specialists in each field. No one person can adequately cover more than one field in the modern advancing health work.

One of the objectives of our present Governor is to build up an efficiently effective health department, to promote preventive medicine to its fullest extent without encroaching unduly in the field of therapeutics or curative medicine. The sphere of a health department is prophylaxis—to protect people from contracting communicable disease, by advice and by furnishing those specific preventive measures discovered by Jenner, Pasteur, Schick, Dick, and other discoveries and developments based on the work of Bering, Ebert, Reed, Gor-gas, Carter, Stokes, Bauer and others.

In harmony with the above, our Honorable Board of Health ruled that the State Health Officer be instructed to intensify the prosecution of health activities, mentioning among other matters, a more vigorous enforcement of the Drug Store Inspection Law, Chapter 11859—(No. 54) Laws of 1927, whereby anyone operating a Drug Store, or any store which by virtue of its advertising or display has the appearance of being such, shall pay an annual fee of \$10.00 and shall at all times have a registered pharmacist, a person qualified to compound such prescriptions as the physician may find necessary to prescribe for his pa-

## ADMINISTRATION

tients. Those who refuse to comply will be prosecuted for violating a state law.

In the future, after due notice has been served, curative biologics will only be given free of charge to those who, by virtue of circumstances, are unable to pay, but it will be required of them that they sign a certificate attesting such to be a fact. This is absolutely necessary in that the Auditor of the State Board of Health must render an account to the State Comptroller of all monies spent.

All prophylactic remedies, such as typhoid vaccine, toxin anti-toxin, smallpox vaccine and carbon tetrachloride for hookworm treatment will be provided free of cost to all citizens of the state as has been the custom in the past.

The Board also took measures to alleviate the malaria situation which has prevailed along the Gulf coast, by providing means to carry on a series of screening demonstrations in each of the counties most seriously affected. This will be done in the spring as soon as the mosquito activity starts with the onset of the warm weather. The Engineering Department will also make dusting experiments and demonstrations for Anopheles destruction, in addition to which the Bureau of Communicable Diseases will carry on extensive experiments with quinine control.

For the rural farming communities in the north and western portion of the state, it is felt that the farming can be made vastly more profitable by the inauguration of an active malaria and hookworm campaign. For the hookworm sufferers there will be great relief if at each home they will provide themselves with the type of privy recommended by the State Board of Health.

How many know that one female hookworm produces as many as 9000 eggs in 24 hours; that these eggs under normally favorable conditions will develop into infective larvae within 120 hours; and that anyone who walks in sand or ground infested with these will become infected by such larvae? Do you realize that the establishment and use of a proper privy at your farm will mean increasing the labor efficiency of your children farm labor from 35% to 75% or even more, besides making life bright and happy?

The State Board of Health approved the negotiations of the State Health Officer with the Rockefeller Foundation by which the services of a highly trained physician was secured as Director of the Bureau of Diagnostic Laboratories. For this position Dr. Paul Eaton was recommended by Dr. W. H. Frost of the Johns Hopkins School of Hygiene and by the Assistant Surgeon General of the U. S. Public Health Service. This appointment will mean a great deal to the medical profession as well as the administration besides being a great relief to the present overworked laboratory staff at headquarters.

In the interest of further advancing the Child Health activities, the State Health Officer was authorized to secure a pediatrician with Public Health experience, preferably one recommended by the American Child Health Association. Lucille Spires Blachly, M. D., has been selected for this position and comes highly recommended

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by the General Executive of this Association, and the Director Division of Medical Service. Dr. Blachly was director of the Bureau of Maternity and Infancy of the State Department of Health, Oklahoma City, Oklahoma and Dr. Wilkes has the following to say of her work: "Dr. Blachly has done excellent work in Oklahoma and has the full cooperation and backing of the physicians of that State. She is capable and experienced and Dr. Crumbine and I are glad to recommend her."

The final action of major importance in this meeting was that of placing tularemia and undulant fever on the list of reportable diseases, as there appears to have been a rather serious increase in recent years. The State Health Officer is therefore, asking the co-operation of all physicians in gathering information regarding prevalence in Florida. It is asked that they report all suspected cases whether confirmed by laboratory diagnosis or not. The laboratories will be ready to assist in the diagnosis by making the necessary serological tests.

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## CHILD HYGIENE AND PUBLIC HEALTH NURSING

Mrs. Laurie Jean Reid, R. N., Director

### CONCLUSIONS

If we are to judge from our observations of the many failures in all lines of endeavor, we would be led to believe that the statement that "Few people really think" is true. Some failures are unavoidable but not the majority. It would appear that any right-minded person with good mental balance would not only carefully plan for the beginning of a piece of work but would go further and try to envision the goal to be attained and proper methods of attainment. An old maxim says that "anything worth doing is worth doing well," and certainly a task not carried to some definite conclusion would appear to be a waste of time and effort. More than that, the fact that results had not been obtained would tend to engender a lack of confidence in the minds of observers.

In the field of public health, the nurse has a very definite place and given good training, there should be valuable accomplishment to off-set the expenditure for her work. Too often the nurse, knowing the attitude of the people with whom she is to work, against her own better judgment, will enlarge her program until she is spreading herself so thinly over her district that she is not leaving a distinct mark in any one place, and this is poor policy.

Before undertaking a piece of work of whatever nature, the nurse in rural work should make a plan which would cover the program from the first notice sent to the newspaper on her arrival to her final arrangement with some responsible local person to carry on when the nurse leaves the county or completes her work in the community in question.

With this thought in mind, the "advance agent" work should be very thoroughly done and should be arranged in proper sequence as

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

follows: First, the nurse should have all possible knowledge of the territory to be covered; second, an advance notice of the nurse's presence and mission in the community with the approximate time to be given to the piece of work; third, professional visits to the local health authorities and physicians; fourth, conferences with all key people, individually or collectively as indicated with whom should be discussed the work in hand and their assistance and cooperation asked; fifth, contact should be made with the various organizations, including women's clubs, men's luncheon clubs which have become so great a factor in providing the wherewithal for corrective work, and churches, where the missionary society and other church organizations are more each year turning their efforts along health lines. In order to carry her work to a satisfactory conclusion, there is usually the necessity for the expenditure of money for corrections and remedial work of various kinds and since this always a local problem, the nurse should see to it that the public is well informed as to the probabilities and the apparent needs in order that the work begun may be effectively completed.

The nurse who is alert and anxious to do a good piece of work will very carefully and painstakingly do her advance agent work. If school work is to be included in her program, preliminary visits should be made to the schools when the teachers should be interviewed and at least the introduction of the nurse made to the children with a brief explanation of what it is all about. All this will serve to place the nurse in the community.

In conducting baby and pre-school conferences, the mother is usually with her children, so that the nurse, if there is sufficient time, can give the necessary instruction. However, conditions in the home are so often responsible for the physical disabilities of the members of the family that a visit to the home would usually be indicated where there is sufficient time. The nurse should have all the information necessary regarding possible expenditures so that they are available instantly when asked for and should have the set-up for clinics or plans for corrective work already on paper for the use of those who may want the information. If the nurse can sit down and talk with the parents explaining patiently and in sufficient detail in understandable English just what the various defects mean and just why they should be given special attention, she is very much more apt to have their cooperation.

We should always stress positive health and everything we do should simply be another thing to help bring about this condition. Advance agent work does take time but it is time well spent and if properly done time is saved, in that the nurse carries her community with her through her piece of work. True it is that many forget or can not be interested, but the majority can be reached if properly approached and there is no better way of gaining interest than by giving people something to do. Let them know that you depend upon them to help you and let them also know what it will mean in accomplishment if they do. Try to arouse civic pride and that also will have its value.

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

Every day the papers and magazines tell us of some piece of work begun, usually with the ringing of bells and the waving of banners, that has fallen through. The public health nurse does not do her work to the waving of banners and the blare of trumpets for the most part. Particularly in Florida where so much of the population is rural, her work is accomplished quietly and not very well understood except by those concerned. It takes courage, as well as good training, a world of common sense, and a fund of humor to plan a piece of work in the rural areas where the counties are sparsely settled and the country roads are lonely and none too good, but to my mind, the rural field is the most fertile field for public health nurses where much can be accomplished if properly and painstakingly planned and the plan carried through to a definite conclusion.

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## BUREAU OF ENGINEERING

Ellsworth L. Filby, C. E., Chief Engineer

BUSINESS IS GOOD!!

When the world of finance shows unmistakable signs of acting like a plane in "bumpy" air, every activity of man is influenced by the reaction. Even health departments react to financial barometers. But there is one thing that can be said never to fluctuate and that is the amount of work to be done. There is always more to be done than there is time for! Health departments are usually subject to cuts in appropriations when economy waves strike our governmental fathers—a foolish practice, we believe, but nevertheless an actual one. With the cuts and slashes in municipal and county health programs, comes more and more work on our state staff. The problems are put up to us; we must meet them. So it is we tighten our belts, renew our search for newer and quicker ways of doing things, and go after the work.

One inspector on our staff once remarked he thought he had his District about worked out but that was three years ago and he is steadily doing more and more work and finding new things to be done. Time brings new problems for in the last two years we have had a very serious increase in malaria in this state and the problem of putting over a screening program, for our scattered rural dwellings, presents itself. Also comes a renewal of the city anti-mosquito programs for in some localities, these programs have lapsed during the past few years of low financial barometer.

And, speaking of low barometers, we can well pattern after the seacoast towns and people. When the barometer goes down, then the people know trouble is coming and prepare for it! In south Florida, a serious drop in the barometer means that storm guards for windows and doors must be put up, that vital machinery such as electric driven water pumps must be protected, that a reserve supply of liquid fuel and even candles should be on hand for trouble. Reserve food supplies are laid in, etc. If the mercury starts sliding down

**BUREAU OF ENGINEERING**

to the bottom of our thermometers, then our growers are on the alert and, as critical temperatures are reached, smudges are started and perhaps the irrigation pumps are put to work to flood tender crops.

But in health work, the reaction is usually different. In times of low finances, the people are loath to put the necessary health machinery into operation. They prefer to gamble and, sad but true, very, very often lose. We are aware of a wet summer and fall season following an extensive drought. Malaria should be on the increase. A warning is issued and people are told to prepare, but they do not do it. Screens are expensive and besides, they keep out the air (so the country folks tell us) but they do not stop to figure that while a mosquito-proof house might cost \$25, they spend \$40 a year on anti-mosquito sprays, dozen or so bottles of chill tonic, and perhaps a doctor's visit and prescription filling. Partial payments and small outlays spread over months is the business motto of today and the people have fallen into this habit. Unfortunately, sanitary improvements such as mosquito proofing a house, building a sanitary privy and installing plumbing can seldom be done on a partial payment plan. If it could, we would get more work done. Finding a way to do this in Florida is one of our jobs.

Business is good. It is too good for our small staff, we have to spread our efforts too thin. The problems are manifold and results meagre in proportion to what we could get with more personnel. And the rewards—well, what are the rewards of a health worker other than the knowledge that he has perhaps done his bit in making this world of ours a little better place to live in and a little more comfortable for others, that he has served well for, truly, happiness is in serving and not in being served.

And so the New Year opens before us—new problems, old problems, new trials, old tribulations, new joys, new sorrows, new co-workers, old standbys, new officials to convince, old ones to spur on. May the New Year provide plenty of work for you and the opportunity for you to serve others by doing it, for therein is the true happiness and understanding.

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**WHY WE EAT DESSERT AT END OF MEAL**

Have you ever pondered the question of why sweet things are eaten at the end of a meal?

Dr. B. C. H. Harvey, who is writing a series of articles on anatomy in Hygeia, the health magazine published by the American Medical Association, gives an explanation.

The part of a meal first eaten is spread over the surface of the mucous membrane of the stomach and becomes saturated with acid and pepsin. The part last eaten (dessert) remains in the center, unaffected by the acid. In this central part, which remains alkaline, the ptyalin of the saliva continues to work for perhaps an hour. This ferment works on carbohydrates, leading water into starch molecules and so making sugars of them. Fats and carbohydrates are not digested in acid; this is the reason we have found it better to eat meat and other proteins at the beginning of a dinner and fats and carbohydrates (cream and sweet things) as dessert.

**BUREAU OF DIAGNOSTIC LABORATORIES**  
**Pearl Griffith, B. E., Acting Director**

**SUMMARY OF WORK DONE IN THE LABORATORIES OF  
 THE STATE BOARD OF HEALTH  
 DURING THE MONTH OF NOVEMBER, 1929**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	1725	934	370	87	27	3143
Diphtheria .....	1267	485	11	804	9	2576
Typhoid .....	457	142	40	109	15	763
Malaria .....	423	189	37	34	123	806
Rabies .....	25	3		1		29
Tuberculosis .....	163	65	7	37	6	278
Gonorrhea .....	368	206	26	146	19	765
Kahn .....	3268	993		524		4785
Water: Count .....		43		190	3	236
Water: Colon .....				254	3	257
Milk: Bacterial Exam. ....	27	124	33	243	12	439
Milk: Chemical Exam. ....	29	124	33	123	12	321
Miscellaneous .....	192	44	14	189	19	458
	7944	3352	571	2741	248	14856

Specimen Containers Distributed ..... 7964

**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin.....	10,000 units	303 Packages
	5,000 units	75 Packages
Toxin Antitoxin.....		15,382 C. C.
Schick.....		2,250 Tests
Tetanus Antitoxin.....	20,000 units	47 Packages
	10,000 units	28 Packages
	1,500 units	813 Packages
Anaerobic Antitoxin.....	100's	3 Packages
	10's	12 Packages
Typhoid Vaccine.....		1,216 Treatments
Vaccine Virus.....		3,470 Capillaries
Antirabic Virus.....		31 Treatments
Antimeningococcus Serum.....		29 Cylinders
Carbon Tetrachloride.....		4,514 Capsules

**THE FIRST TWENTY YEAR EMPLOYEE OF THE  
 STATE BOARD OF HEALTH SINCE THE  
 LATE DR. JOSEPH Y. PORTER**

Henry P. Brown became an employee of the State Board of Health of Florida on December 15, 1909 and enjoys the distinction of being the first to claim twenty years of unbroken service. His faithful, conscientious, uncomplaining conduct has endeared him to the Staff. An appropriate medal is being designed for presentation to Mr. Brown as a token of esteem and recognition of his worth.

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****SYNTERESIS**

If "an ounce of prevention is better than a pound of cure" and "a stitch in time saves nine," then how much better is it to take three small preventive shots than to contract diphtheria or typhoid; how much better is it to have one vaccination to prevent smallpox than to have 9,000 pocks and perhaps as many scars.

Synteresis, a word seldom used, means the same as prophylaxis or preventive treatment. The economic soundness of the idea is established. Practitioners of medicine are turning their attention more and more to preventive medicine. The professors of the Harvard Medical School have written a book, the purpose of which is to help other teachers in bringing to medical students a full realization of their responsibilities—their opportunities to serve in a larger way than did the doctors of yesterday. This book deals in teaching preventive medicine as it relates to each of the specialties. Its twenty chapters, cover twenty subjects taught in medical college beginning with anatomy and physiology and ending with surgery and industrial hygiene.

There is no field of medicine, no branch or specialty in which synteresis or preventive treatment is not applicable.

For blindness of the newborn and others; for rheumatism, verereal diseases, ulcer of the stomach; for all the contagious and infectious diseases, venereal infections, tuberculosis and the rest; for diseases of the skin, the kidneys, the heart and blood vessels and for high blood pressure; for mental derangements; for the accidents to mother and infant in childbirth, an ounce of prevention is better than a pound of cure.

For deformities, cancer and a long list of major and minor surgical conditions, a stitch in time will often save funeral expenses.

See your doctor early—long before you get too sick to go.

**HEALTHMOBILE**

During November, Mr. W. Y. Randle, operator of the State Board of Health motion picture outfit gave 32 showings in Indian River, St. Lucie and Martin Counties, and at the Marion County Fair. The total attendance was 4,023.

We want the greatest possible number of people to profit by seeing the health movies. Besides being instructive they are entertaining and full of human interest.

The cooperation of local health workers, school authorities, teachers and others so essential to the success of this work, has been greatly appreciated.

Dating must be made well in advance so that the itinerary can be planned, needless travel avoided and the most possible good accomplished.

## BUREAU OF COMMUNICABLE DISEASES

### Pupils Appreciative

From the Vero Beach and Wabasso school pupils come fourteen nicely written letters expressing pleasure and emphasizing the particular lesson each had received from seeing the health pictures. These letters show that the writers had caught the ideas the pictures were intended to convey. They were well written and greatly enjoyed. Let us have more. They help those who write as well as those who receive them.

### A HINT ON MALARIA

Dr. David Rose of Sebastian who has served the people of that section for over 20 years states that from 1908 to 1918 he found malaria quite prevalent in an area twenty miles long from north to south and four miles wide from the coast back to the Sebastian River. There were about one thousand people in this area and they had malaria the year round. For a time in one community every family had one or more members with "chills and fever." He preached to them incessantly about the use of screens and nets until they adopted his suggestions and malaria practically disappeared. Being a modest man the doctor does not boast but his teachings were probably worth more to those people than any of them could realize. One might infer that other doctors and other communities could profit by using screens and nets. Malaria causes poverty. Malaria can be prevented. Screening is one way to do it.

### NOTICE TO DOCTORS

Undulant (Malta) fever and Tularemia have been placed on the list of reportable diseases by official action of the State Board of Health.

The reporting of these and the other reportable diseases is a duty you owe to your community.

### VIRULENCE TEST

Arrangement has been made with the Director of Laboratories to make a virulence test on diphtheria organisms found in cultures taken for the detection of carriers. Thus we hope to avoid needless inconvenience to doctors, health officers and carriers of non-virulent organisms.

### TRAFFIC IN GERMS

### HOW DISEASES ARE SPREAD, AND THE GERM MARKET

The manner in which disease is transmitted was, until recent years shrowded in dark mystery. With the aid of the compound microscope scientists have pried into the secrets of nature and into the private lives

## BUREAU OF COMMUNICABLE DISEASES

of microscopic plants and animals. We know how minute and prolific the disease producers are and how, by virtue of overwhelming numbers and countless opportunities to ride, they get about so readily though they have neither legs nor wings.

We have ceased to wonder how disease is spread. We wonder how anyone can escape. Unconsciously, carelessly, sometimes indifferently or even viciously mankind maintains a brisk and continuous traffic in germs. Perhaps more than any other of the higher animals the individuals of the genus homo swap microbes. In fact the give and take system of bacterial traffic would seem to be developed to a degree of efficiency excelled by no other.

For many diseases the infection is present in the nose and throat secretions of patients and carriers. Such persons, if their hands are freshly soiled with these secretions, may deposit on everything they touch a sufficient number of germs to infect many who come in contact with those soiled objects.

The idea of a public drinking cup or a family tooth brush is too revolting to discuss. The danger of kissing has been made a joke. The friendly handshake, a custom established by long usage, may prove disastrous if the hands are not free of deadly germs. The pencil, eraser, telephone transmitter, anything in fact, that touches or goes into the mouth may prove an agent for the transmission of disease. The door knob, stair rail, chair arm, street car strap, even money may have been soiled with the hand of a careless person.

### What To Do About It

No one need be too finicky about contacts with all these objects but one can well afford to be a little finicky at least about eating, placing the hands to the mouth or eyes and moistening the fingers with the tongue if the hands have not been recently and thoroughly cleansed with soap and water and dried with a clean towel. Cover the nose and mouth when you cough or sneeze. Avoid persons who neglect this precaution.

Then danger of "catching" common colds, influenza, diphtheria and a number of other more or less serious infectious diseases may be minimized by a little care and cleanliness.

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### DOCTORS PLEASE NOTE

In the future the State Board of Health is considering free antibiotic treatments, in which case no treatment will be sent unless the name, age and sex of patient is given by the attending physician when treatment is ordered. For more details see next issue of Health Notes.

**BUREAU OF VITAL STATISTICS**  
**Stewart G. Thompson, D. P. H., Director**

**NEW CERTIFICATE FORMS**



The new United States standard certificates of births and deaths are now in effect. Beginning with this month, the new forms should be used when reporting births and deaths to the State Board of Health. Please do not use any of the old, obsolete forms in the future. Every local registrar has been generously supplied with the new forms so that there is, therefore, no reason for using the old ones.

To keep the Florida Vital Statistics records up to standard, it is necessary to use the very latest approved certificate forms.

These new United States standard forms are the ones required by law in this state. They are also the forms used in practically every state in the Union at the present time. The centralization of birth and death records has spread very rapidly in recent years and the United States Registration Area for Births and Deaths now includes all but three states. These three states are working very hard to bring their birth and death registration up to standard and as soon as New Mexico, South Dakota and Texas are standardized, it will no longer be called the United States Registration Area for Births or Deaths, but "United States Birth and Death Registration".

**FT. PIERCE DOCTOR CONGRATULATED**

Very often the attending physician has difficulty in securing the history necessary to properly fill out a birth certificate. In some cases, the doctor is able to gather the history of the father and mother during a visit before or after confinement. However, in many instances, it is inopportune to talk about a birth certificate and, therefore, the busy doctor gets away without certain necessary and important information as to the family history which should appear on the original record which is to bear his signature.

Dr. L. L. Whiddon of Ft. Pierce, Florida, has installed a very clever system as an aid in securing family history. Dr. Whiddon has had postal cards printed, allowing space for the date of birth, baby's name, sex, father's name and age, mother's name before marriage, etc. At the bottom of the card, a notice to the parents appears, requesting the card to be mailed promptly. This card is addressed to Dr. L. L. Whiddon of Ft. Pierce and it also includes the postage. In this way, Dr. Whiddon has been very successful in securing the necessary information for preparing very excellent birth certificates.

The parents of a child appreciate the diligence of their family physician in placing on file the birth certificate which is the evidence provided by law of their baby's citizenship. Many times after the faithful physician has passed on to his reward, the young man or the young woman secures a certified copy of this birth certificate, bearing the signature of the good, old family physician and is able to secure employment, passports and otherwise prove American citizenship, inheritances, etc.

### BUREAU OF VITAL STATISTICS

Hosts of faithful doctors in Florida look after the interests of parents and children under their care who do not receive special mention publicly. However, since Dr. Whiddon's unique system has just come to the attention of the writer, it seems appropriate to pass the information on for the benefit of those who may be interested.

The end of 1929 has been reached and the pages of 1930 are now open. It is hoped that the 1929 records for births will be complete. Every physician is, therefore, requested and urged to check over his personal accounts to see that each birth he attended has been REPORTED.

The following tables indicate the number of deaths from certain diseases by months, for 1929 as compared with the previous year. (Provisional figures.)

#### TYPHOID DEATHS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total
1929.....	2	4	5	11	8	11	13	6	4	5	69
1928.....	7	2	9	4	18	12	19	14	7	14	106

#### MALARIA DEATHS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total
1929.....	24	7	15	14	30	36	60	57	66	53	362
1928.....	9	9	13	10	24	16	26	36	39	84	266

#### DIPHTHERIA DEATHS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total
1929.....	8	6	3	3	3	1	1	8	8	5	46
1928.....	13	7	4	4	5	2	6	8	4	7	60

The 59th Annual Meeting of the American Public Health Association will be held in Fort Worth, Texas, during the week of October 27, 1930, with the Hotel Texas as headquarters.

The Annual Meetings of this oldest and strongest of public health organizations bring together for a week of scientific discussion, all of the public health leaders of the continent. It is always the most important health convention of the year. Health officers, nurses, dieticians, sanitary engineers, child and industrial hygienists—all of the specialists that make up the public health profession—meet to consider their common problems. Each of the ten Sections of the Association—Health Officers, Laboratory, Vital Statistics, Public Engineering, Public Health Nursing, Public Health Education, Food, Drugs and Nutrition, Industrial Hygiene, Child Hygiene and Epidemiology—arrange an individual program and there are a number of General Sessions to which the public is invited.

Detailed programs of the Fort Worth meetings will be announced in the official publication of the Association—THE AMERICAN JOURNAL OF PUBLIC HEALTH AND THE NATION'S HEALTH. Further information may be obtained from the Executive Secretary, Mr. Homer N. Calver, 370 Seventh Avenue, New York, N. Y.

## BUREAU OF VITAL STATISTICS

## \*PROVISIONAL MORTALITY FOR OCTOBER, 1929

Int'n'l List No. (1920)	FLORIDA	Number of deaths		
		Total	White	Colored
1-205	ALL CAUSES.....	1,415	780	635
1	Typhoid.....	6	4	2
5	Malaria.....	63	37	26
6	Smallpox.....	0	0	0
7	Measles.....	0	0	0
8	Scarlet fever.....	0	0	0
9	Whooping cough.....	4	0	4
10	Diphtheria.....	5	4	1
11	Influenza.....	20	10	10
22	Acute anterior poliomyelitis.....	0	0	0
23	Lethargic encephalitis.....	1	1	0
24	Meningococcus meningitis.....	0	0	0
31-37	Tuberculosis—all forms.....	73	21	52
43-49	Cancer—all forms.....	91	71	20
54	Pellagra.....	33	11	22
57	Diabetes mellitus.....	17	10	7
70-86	Diseases of the nervous system.....	129	71	58
74	Cerebral hemorrhage, apoplexy.....	105	58	47
87-96	Diseases of the circulatory system.....	198	132	66
87-96	Diseases of the heart.....	181	119	62
97-107	Diseases of the respiratory system.....	65	29	36
100-101	Pneumonia—all forms.....	47	22	25
108-127	Diseases of the digestive system.....	112	63	49
113	Diarrhea and enteritis (under 2 years).....	22	12	10
128-142	Nonvenereal diseases of the genitourinary system.....	175	98	77
128-129	Nephritis—all forms.....	149	83	66
143-150	The puerperal state.....	24	16	8
INFANT MORTALITY				
Number of LIVE BIRTHS.....				
		2,331	1,532	799
Number of STILL BIRTHS.....				
		163	73	90
Number of DEATHS under 1 year.....				
		151	67	84
By cause: (deaths under 1 year).....				
		109	56	53
	Infectious diseases (1-42, exc. 11, 31, 37a).....	10	5	5
	Infectious diseases (1-42, exc. 11, 31, 37a).....	15	5	10
	Gastro-intestinal diseases (112, 113).....	16	8	8
	Malformations and early infancy (159-163).....	68	38	30
	Premature birth (161a).....	36	16	20
	Injury at birth (161b).....	7	6	1

## ALL CAUSES, BY AGE

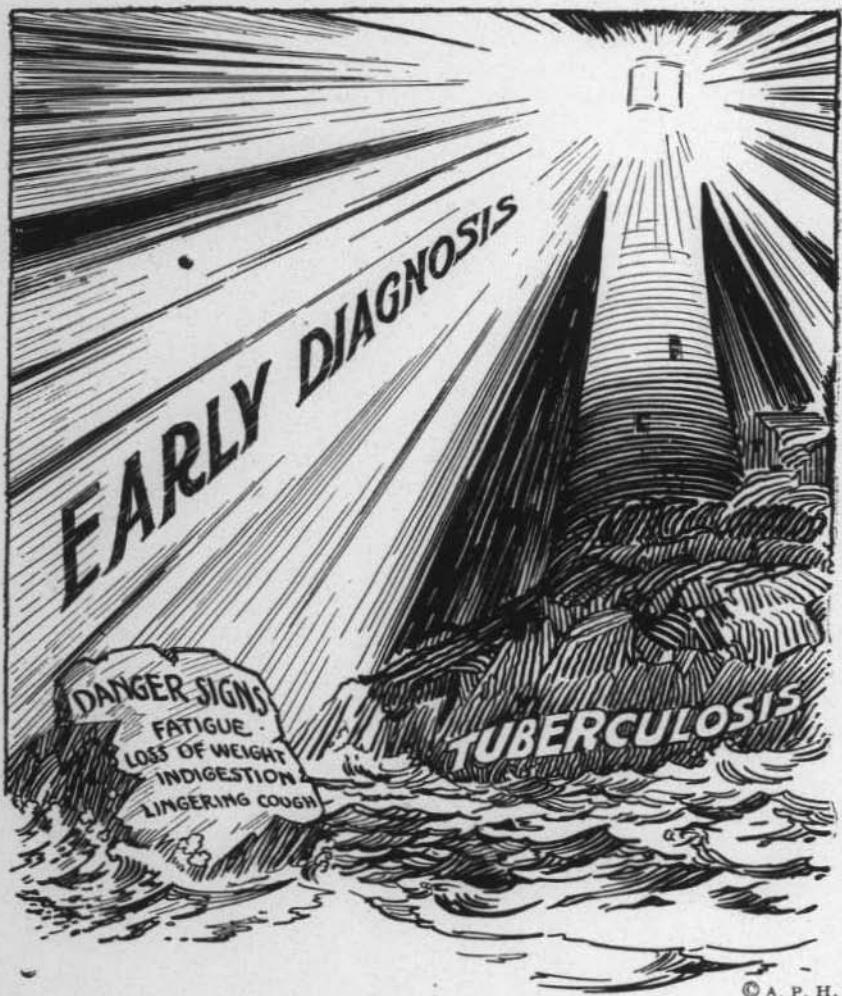
Ages	Deaths								
-1	151	1	18	2	9	3	7	4	9
0-4	175	5-9	20	10-14	15	15-19	50	20-24	66
30-34	56	35-39	77	40-44	73	45-49	106	50-54	96
60-64	110	65-69	101	70-74	105	75-79	73	80-84	40
90-94	10	95-99	4	100-	1	Unk.	10		
Total									

\* Includes delayed Certificates

HUMAN LIFE IS THE STATE'S GREATEST ASSET

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CONSULT YOUR DOCTOR AND AVOID DANGER





# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

FEBRUARY, 1930

No. 2

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

DOES IT PAY?—*Eaton*

MOSQUITO CONTROL—*Filby*

WHAT IS HEALTH?—*McLaughlin*

THE NEW PUBLIC HEALTH—*Brink*

ANTIRABIC VACCINE FREE—*Hanson*

MORTALITY FOR NOVEMBER—*Thompson*

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HENRY HANSON, M. D., STATE HEALTH OFFICER

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*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
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\*Field Supervisor

## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### PROPHYLACTIC AND THERAPEUTIC MEASURES

In recent issues of Health Notes mention has been made of changes in the distribution of biologics. The attention of physicians is especially invited to the ruling of the State Board of Health, at the time of the December meeting of the Board, limiting the free distribution of diphtheria antitoxin as well as tetanus antitoxin to the class of citizens which is financially unable to pay.

Physicians who apply for antitoxin for patients in poor economic circumstances are asked to fill in the blank, which will accompany these products, giving the age, name and sex of patient, as well as the name of the doctor administering this treatment. The therapeutic biologics for patients who do not come within this classification will be handled by the drug stores throughout the state and will not be generally distributed by the State Board of Health as has been the practice in the recent past. Prophylactic tetanus antitoxin in 1500 unit doses will be furnished as has been customary heretofore. As stated, prophylactic tetanus antitoxin, typhoid vaccine, smallpox vaccine and all strictly prophylactic remedies will be furnished by the State Board of Health and will be obtainable from the laboratories at Jacksonville, Tampa, Miami, Pensacola and Tallahassee, as well as in certain substations at logical centers which will be announced later.

#### Anti-Rabies Inoculations

Anti-rabies vaccine will be furnished free of cost to all who may unfortunately require this treatment. This is regarded as a prophylactic for a condition in which the victim has had no opportunity of protecting himself. Rabies exists because of a lack of enforcement of the simple measures which, if conscientiously carried out, would eliminate this disease from existence, and since the authorities responsible for this enforcement do not make elimination possible, it does not appear just that the victim should be compelled to pay for his misfortune. In the furnishing of this free treatment, it will be necessary for the physician requesting it to submit the name, age and sex of the patient before treatment will be sent out. The treatments, however, will be promptly sent as soon as this information is received.

The general free distribution of anti-rabies virus will be effective after the first of February.

#### Requests for Exclusion of School Children

There have recently been requests for a resumption of ruling to exclude recently arrived children from schools for a period of two weeks. The State Board of Health does not see any justification for

## ADMINISTRATION

putting such a ruling into effect at the present time. There exists no epidemic at present which justifies such a measure; furthermore, exclusion from school does not accomplish the object sought in that such exclusion applies only to schools and the individuals affected are permitted to attend movies, church services, Sunday school or any other public gatherings where control and supervision are not possible. With the present system of inspection of the schools by health officers, both local and state, and the frequent visits of public health nurses, both local and state, it is evident that there is a much more effective control of incipient epidemic disease than in the case of children running at large without such supervision.

The State Board of Health is zealously watching the health of the citizens of the state and with its ample facilities is obtaining information on any menace and will institute restrictions and regulations as soon as a logical reason appears. There is no occasion for any individual or community to feel alarmed before an alarm is sounded by their logical health guardian, the State Board of Health.

## BUREAU OF DIAGNOSTIC LABORATORIES

**Paul Eaton, M. D., D. P. H. Director**

### DOES IT PAY?

The State Health Department has for a number of years been stressing the importance of immunizing the whole population against diphtheria. The mere introduction of a new method of treating this disease would not diminish the number of cases of the disease any more than would a new method of treating broken legs diminish the number of broken legs to be treated. But active immunization against diphtheria by the use of toxin-antitoxin or diphtheria toxoid does diminish the number of cases of the disease as can be seen from the accompanying table:

TABLE

Year	Cases Reported	Deaths	Diphtheria Antitoxin Distributed
1926	1224	123	31,630,000 units
1927	1095	93	26,415,000 units
1928	588	69	18,490,000 units
1929	580	*	22,300,000 units

\* Deaths for first 11 months of 1929 were 54 as compared with 66 for same period of 1928.

Leaving everything else out of consideration it is worth while to note that if the State had distributed antitoxin in the last three years of this period at the same rate it did in 1926 it would have

**BUREAU OF DIAGNOSTIC LABORATORIES**

distributed 27,000,000 units more than it did. This saving of more than \$6,000.00 is the smallest part of the whole saving accomplished by the use of toxin-antitoxin, as will be readily understood by any person who has ever had a case of diphtheria in his family.

**SUMMARY OF WORK DONE IN THE LABORATORIES OF  
THE STATE BOARD OF HEALTH  
DURING THE MONTH OF DECEMBER, 1929**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	1697	1067	36	85	65	2950
Diphtheria .....	894	232	24	576	2	1728
Typhoid .....	370	116	14	24	30	554
Malaria .....	299	122	11	19	103	554
Rabies .....	24	3				27
Tuberculosis .....	151	68	9	52	9	289
Gonorrhea .....	364	134	30	125	23	676
Kahn .....	2794	1533		514		4841
Water: Count .....		49		96	5	150
Water: Colon .....				134	5	139
Milk: Bacterial Exam. ..	75	99	44	288	13	519
Milk: Chemical Exam. ..	80	69	44	54	13	260
Miscellaneous .....	253	58	28	356	138	833
	7001	3550	240	2323	406	13520
Specimen Containers Distributed .....						8456

**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin.....	10,000 units	196 Packages
	5,000 units	114 Packages
Toxin Antitoxin.....		13,005 C. C.
Schick.....		4,100 Tests
Tetanus Antitoxin.....	20,000 units	10 Packages
	10,000 units	15 Packages
	1,500 units	564 Packages
Anaerobic Virus.....	100's	8 Packages
	♦ 0's	24 Packages
Typhoid Vaccine.....		614 Treatments
Vaccine Virus.....		4,880 Capillaries
Antirabic Virus.....		19 Treatments
Antimeningococcus Serum.....		19 Cylinders
Carbon Tetrachloride.....		6,712 Capsules

ALL REQUESTS FOR BIOLOGICS SHOULD BE DIRECTED TO  
THE STATE LABORATORY, STATE BOARD OF HEALTH  
JACKSONVILLE, FLORIDA

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****THE NEW PUBLIC HEALTH**

Many who read Florida Health Notes can recall the public health practices of earlier days when the chief duties of the health officer were to placard and fumigate.

In his "Looking Backward Over Fifty Years of Public Health Work in Florida," (Journal, Florida Medical Association, August, 1925, et seq.) the late Dr. J. Y. Porter, Sr., referred to some of the control measures then in vogue, measures that now seem crude as some of ours may seem to another generation. Of special interest is the firing of cannon and burning tar to make a smudge for yellow fever control. You from other states will recall the use of asafoetida to keep off measles and the "mad stone" for rabies, not to mention the pudding and molasses diet to render mild an attack of smallpox.

The very word quarantine signifies an arbitrary isolation period of forty days which period has been modified to accord with increased knowledge about the mode of transmission and period of communicability for each contagious disease.

Little wonder that doubt arose in the lay mind and protests were heard when the placing of armed guards failed to prevent the spread of yellow fever while the insect carrier was hatched in every home and allowed to migrate and bite, unhampered by screen or net. Doubts and complaints are always heard when any communicable disease control measure interferes with usual human activities, particularly if the measure is one to which people are not accustomed.

The early health officer with his arbitrary quarantine period and sulphur or formalin fumigation undoubtedly accomplished considerable good. The progress of epidemics must have been retarded and his services were worthy of appreciation. The writer should know, having served his day as part time health officer in a rural area during a smallpox epidemic in 1909. But for the satisfaction of knowing one's duty and doing it and the harsh comments from some of the clientele, the emoluments as usual, were nil.

The health officer of twenty or thirty years ago did not concern himself with tonsils and adenoids, dental care or defects of vision. These received attention only when they became so troublesome as to require the care of the family physician or the dentist whose main business was to pull teeth. The resultant harvest of rheumatism, heart disease, Brights, headaches, nervous manifestations and many other complaints must have added greatly to the doctor's worries and the patients' distress. Many of these deformities and infirmities of other days have now become rare.

Many will recall hearing about "the germ theory of consumption". Pasteur gave his first antirabic treatment in 1880 and diphtheria antitoxin was first used in 1893.

## BUREAU OF COMMUNICABLE DISEASES

The use of the compound microscope, the methods of isolating and culturing bacteria and studying experimentally the resultant growth and toxin production have added vastly to our knowledge of bacterial and other diseases.

To Jenner, Pasteur, Lister, Reed, Gorgas and a host of others, we owe a debt of gratitude. As a result of knowledge gained through their labors many safeguards have been thrown about the public health and the individual. The technique of preparing, distributing and administering smallpox vaccine has been greatly refined, safe and effective methods of immunizing against other communicable diseases have been developed, numerous curative serums are available, the mode of transmission and new measures for the control of infection have been discovered. With but few exceptions the spread of disease in epidemic form indicates carelessness, neglect, inefficiency or inadequate provision for health protection.

With increasing density of population, the need of health service has increased and that need has been partially met. Our conception of what constitutes the field of public health has changed. Many phases of human activity have a definite relationship to health. The well ordered health department must choose and lay stress on those activities that will benefit most, the largest possible number of people.

Education—health propaganda, if you please,—is and must remain a most valuable phase of our work. With the intelligent co-operation of an enlightened people your health department can further safeguard your household and community from costly but preventable sickness.

### The Physician

The family doctor, though he may be relieved of certain responsibilities by the new public health program, will find new problems, new duties and new services to render his patients; his importance to the community must increase, his status must improve with that of his community. As in the past he will prosper in proportion to the increasing value of the service he is able to render.

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## HEALTH ECONOMICS

Did you ever compare the cost of preventable sickness with that of adequate protection?

Try it once. On the one hand you have the cost of medical care, nursing, drugs, lost time, loss to business and decreased production of farm, dairy, factory or mill. On the other hand, there is your share of tax money (perhaps 25¢ per capita) for the health department, cost of screens, cost of adequate means for disposal of wastes, proper diet and an annual health examination. You might be surprised to know what a large balance will appear in favor of prevention and that without considering the comfort and convenience which alone are worth all the cost of the precautionary measures.

**BUREAU OF ENGINEERING****Ellsworth L. Filby, C. E., Chief Engineer****MOSQUITO CONTROL AT FT. PIERCE**

The third annual report of the St. Lucie County Sanitary District, W. I. Fee, Ft. Pierce, chairman, has been received and is a most interesting resume of the work which has been so ably carried on by Mr. Fee and his fellow workers.

Ft. Pierce has long had the reputation of being "mosquito heaven" due to the hordes of *Aedes taeniorhynchus* that infest the city and county communities along the Indian River. The mangrove salt marshes on the "island" or peninsula lying between the Atlantic Ocean and the famed Indian River, following high tides, heavy rainfall or both, produce billions of mosquitoes. As the *Aedes taeniorhynchus* lays her eggs upon the dry marsh, which will later be flooded, these eggs accumulate day by day until the high waters reach them. Then they all start to hatch and the entire crop comes off at one time making a definite infestation date. The hordes of mosquitoes will gradually disappear but flight predictions can readily be made by studies of rainfall, tidal range and a knowledge of the mangrove areas. These flights have made existence miserable for man and animals along the river, and have very seriously curtailed the development of the section during the summer. Little work can be done in the open when an infestation is on. Even railroad track crews have to be so bundled up in clothing that they can hardly work. Construction work practically ceases. Gradually the flight migrates inland and disappears. In August 1926, Norman G. Platts, city health officer of Ft. Pierce, commenced the first year-round scientific study of conditions in mangrove mosquito breeding areas. Mr. Platts has since continued his observations and has been engaged in the actual control program. Early observations led the district officials to abandon the proposal of spending \$500,000 on a diking and pumping—drainage proposal, which had been advanced by W. D. Wrightson and voted upon favorably by the people. The plan adopted consisted primarily of drainage ditches or, as Mr. Fee calls them, "minnow (*Gambusia affinis*) access ditches." The procedure adopted is to clear right-of-ways through the mangrove growths to reach the numerous open areas which are covered with dense growths of "pickle weed." Ditches are dynamited or hand dug to open these areas to the Indian River. No attempt at drainage to the ocean is made. An extensive net work of parallel ditches all over the mangrove and pickle weed areas is created so that all the ponds, sloughs, large shallow basins, etc., are connected to the Indian River. Arterial ditches are dynamited while laterals and secondary ditches hand dug. These ditches allow, first, a quick run-off or drainage of rainfall or tide thus decreasing the breeding grounds from thousands of acres to hundreds before the eggs start hatching. Also thousands of eggs and young larvae are carried to the river. Secondly, thousands of minnows follow up these ditches and work in the very shallow areas at the head waters eating larvae that

## BUREAU OF ENGINEERING

otherwise would hatch out. Extensive observations as to growths and area to be covered are the guides to economical ditching operations and Mr. Platts has covered the "island" very thoroughly. Air plane maps are also used to spot low areas.

In 1927, the City of Ft. Pierce largely financed the operations and 16.69 miles of ditches were constructed in the very worst area directly across from the city. \$8,040.13 was thus spent. The summer of 1927 was a very dry one and the season was fairly free of flight.

In 1928, a six mill tax on the district was collected in accord with a special Act of the 1927 legislature pertaining to this district. \$22,900 was collected. 35.69 miles of ditches were constructed and the 1927 system maintained and improved. Some freedom from the pests resulted but an August gale blocked some of the ditches through blown down timber, etc., and an "old time" flight resulted. The result of this storm and flight was to increase the widths of ditch clearing and to add more lateral ditches.

In 1929, the six mill levy produced \$20,498 and 49.98 miles were added during the summer to the drainage ditch system in the island. Thus, there are 102.36 miles of ditches now functioning on the island. The season was a good one for mosquitoes—abundant rainfall, high tide, cloudy days, favorable winds. In other localities the mosquitoes were very bad but in Ft. Pierce there were less than ever known before. People who formerly would not stop overnight in Ft. Pierce now make it their stopping place—for Ft. Pierce is more nearly free of mosquitoes than other nearby points. Traveling men have commented on the lessened numbers of mosquitoes. Early returning winter residents remark on their absence. The stores report steadily decreasing sales of "skeeter dope"—spray guns, etc., and even screen wire! It is not claimed that the control is 100 per cent in results for some infestations have occurred. These, however, have only been estimated as about 10 per cent of former infestations. As the flight range of the *Aedes taeniorhynchus* is about 10 miles, remote areas still produce the usual hordes and some drift into the center of the control area.

The work is about two-thirds done in the salt marsh areas. The section north of the inlet, which was opened in 1929, is largely complete but the finishing ditches will be put in this year. South of the inlet a bad area is opposite Eden and continues to the Martin County line. This should be covered this year. The ditches seem to stand up very well as the soil is very mucky and largely matted with roots. The very flat gradients available keep down scouring action. The future looms bright for Ft. Pierce. Their new port is open and their most destructive advertisement, the mosquito, is on the wane. Thus, St. Lucie County has made a fine contribution to science—a contribution due largely to the perseverance and undying optimism and faith of Mr. W. I. Fee. Mr. Platts has carried on the actual field work and deserves high commendation. All-together, \$56,555.26 has been collected for this work—less than two years' interest at six per cent on

### BUREAU OF ENGINEERING

the bond issue, and \$2,412.70 is on hand in county banks. In the area north of the inlet eight miles of hand ditches and 13 miles of dynamited ditch have been built, in the inlet to Mud Creek area, 26 miles hand and 18 miles dynamite ditch; Mud Creek south towards Martin County line, 30 miles hand ditches and 11 miles of dynamited ditch. It is estimated that 4,000 of the 6,000 acres of salt marsh-mangrove in the county are controlled by these ditches. The equipment consists of a 26 foot launch with an 18 horse engine, one 20 foot scow, one 18 foot skiff, one 16 foot skiff, one Evinrude motor, one Graham 2 ton truck, axes, shovels and other tools.

That *Aedes taeniorhynchus* can be controlled has been practically demonstrated at Ft. Pierce at a very reasonable cost. Other counties can organize—Palm Beach under the able leadership of A. E. Detwiler of Lake Worth is about ready to go. Indian River County under Alec McWilliams is carrying on its work started several years ago. Martin County has dropped its work due to unfortunate circumstances.

Salt marsh mosquitoes can be controlled. We can control malaria transmitting mosquitoes, *Anopheles quadrimaculatus*, also by similar operations and far more reasonably as their flight range is less. Why should Florida have mosquitoes? An awakened public led by a few enthusiasts such as Mr. Fee at Ft. Pierce can do it. We must do it if Florida is to come into her own. A full report of the St. Lucie County Sanitary District operations can be secured from Mr. W. I. Fee, at Ft. Pierce. IT CAN BE DONE.

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### CHILD HYGIENE AND PUBLIC HEALTH NURSING

Clio McLaughlin, R. N., Acting Director

#### WHAT IS HEALTH ?

Probably the most widely discussed subject of the present time is Health. How few of us know the real meaning of the word. (To most people the word "health" means merely a sound body, free from disease.) Health, however, means more than a well body. It means a sound, whole body, mind and soul, well being, no weak spots, all organs able to function properly, whole in mind as well as body. Seldom do we find a straight thinking mind in a diseased body.

It is with the idea of attaining perfect health for our country that the medical profession and health departments are working today. It is for this that public health nurses are in the field teaching people in the towns and rural districts some of the secrets and blessings of health and advising mothers about the care of their children so that we may have strong, stalwart citizens in time to come.

Health is a community problem. To have good strong communities, each individual must learn the importance of keeping well and the general rules for doing so. Each citizen has his contribution to make whether he be a patient, a doctor, a nurse, or a public health official. On the health stage, every citizen must play his part. Parents must

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

be able to guide their children in right thinking as well as in the care of their bodies. It is as much a social as a personal problem.

Slowly, but very surely, public health workers are instilling into the minds of the general public the idea that many of their sufferings spring from neglect of the simple laws of health, for one cannot disregard these laws and keep well. The time is coming, we believe, when society will adopt universal health as an ideal.

People have been informed that by suitable preventive measures, epidemics can be avoided and thousands of dollars saved. They know that small-pox, typhoid fever, diphtheria, hookworm, and malaria, if not prevented, lower the morale of the community, reduce personal efficiency, reduce community prosperity, and that they affect the business man as well as the farmer. Each person should take an interest in his or her community and if this is done, together with the effort being put forth by the medical authorities, there is no reason why health in Florida should not rank first among the states.

Recently, a Florida health nurse sent into the office of the State Board of Health her plan of health work for the coming year. This included prenatal classes, Little Mothers' League, infant and preschool conferences, literature for children and grown-ups, and entertainment for children. The clearly defined program showed a broad vision and thorough understanding on the part of the nurse of problems to be dealt with, since every phase of health work was covered. Entertainment for children is quite as essential to their good health as clean teeth and clean hands, since it gives them an opportunity to develop personality through straight thinking rather than through some other technique. For instance, the child that has a wound dressed and does not cry but says at the conclusion, "There now, I am a real man," gives much greater promise of becoming an influential citizen than the child who torments his mother for an apple and is told that if he asks again he will be spanked, calls to his mother, "Mother, when you come up to spank me, bring me an apple." Children of the latter type are a nuisance not only to their parents and teachers but to the community at large. Florida wants citizens of the former type—good substantial men and women.

The nurses in the state also work up tonsil and chest clinics. These clinics are sponsored by the different local clubs and the doctors in the districts do the work for a nominal sum.

All of this goes to show that almost everyone is "On the job in Florida"—which means that Florida will attain the goal for which she is striving. If we have healthy children, they are able to enter school at the appointed time and thereby avoid growing to old age without being able to write their names. Illiterates as a rule are the law breakers and the ruin of the country, not always intentionally, but because of their inability to read and know the things that stand for good citizenship.

**BUREAU OF VITAL STATISTICS****Stewart G. Thompson, D. P. H., Director****AVERAGE LIFE SPAN SHORTER**

In the July publication of "Science", Professor C. H. Forsyth of Dartmouth College declares there is a decline in the average length of life and takes issue with those who are so elated with results obtained in their own immediate fields leading to significant reductions not only in certain death-rates but also in the prevalences of certain diseases that they feel justified in predicting marvelous increases in the average length of the whole of life in the no great distant future. Professor Forsyth explains:

"Most of these optimistic authorities have failed to appreciate that practically all these results have been attained in children's diseases and that little or no attention has been given to the situation at ages beyond the prime of life. The writer claims that conditions in this country at advanced ages have been on the down grade ever since the first mortality records were established at Washington and that they have now reached such a pass that all the great gains at the early ages are already more than offset by the losses at advanced ages. \* \* \*

"The main results, shown here, were obtained from abridged mortality tables constructed from the population and mortality statistics of the males of what are now known as the original registration states—the New England states and Indiana, New Jersey and New York—or the only states which have supplied satisfactory records of deaths ever since 1900—and even 1890. \* \* \* The results for the females are not given here but present the same picture—in somewhat less smooth form.

"It will be understood, of course, that there is an average length of life corresponding to each age—the average length from that age on—although it is usually called the expectation of life in that case. In working with abridged mortality tables, it is necessary to omit the first few ages—say, before age ten—for well-known reasons, but the expectation at age ten is usually a rough approximation of the average length of the whole of life. \* \* \*

"Every one has been familiar with the consistent improvement of conditions at earlier ages and some have been more or less aware of the situation at advanced ages, but there is no printed evidence that any one was sufficiently aware of the seriousness of the latter situation to propose the pertinent question of whether the latter situation would ever develop to the point where it would dominate. In any case, the question is no longer pertinent—the decline at advanced ages already dominates and the average length of life—or at least the expectation from age ten—is already going down. \* \* \*

### BUREAU OF VITAL STATISTICS

"It is well to recognize that improvement at the early ages has a rather definite limit and that the decline at advanced ages has no appreciable limit. It follows naturally that with all the improvement in the world at the early ages, the present downward trend at the advanced ages, if unchecked, will continue to dominate and produce a greater and greater net decline in the average length of life.

"The great decline at advanced ages is remarkably concentrated about age seventy although it extends as far back as age forty. \* \* \*

"To me, the whole picture, from our earliest records in 1890 to the present time, points consistently and inevitably to a future of a declining average length of life until the American adult wakes up to the fact that the odds are at present heavily against his living as long as his father or grandfather. Some will say—and no doubt truly—that it is all a natural consequence of the great drift to the cities. Others will go farther and say that life has become too fast and strenuous and that we do not know as yet how to adjust ourselves to such a life. To the medical authorities the whole problem will loom as one of relieving the strain upon the heart. But little will be accomplished until the American adult himself is duly informed and made to realize that he is in the midst of a decidedly losing fight and that the situation will continue until he applies himself energetically to be superior to his environment. Moreover, each adult must fight his own individual battle, since he usually brooks no interference with his own individual mode of living. Medical authorities and scientists can be depended upon to care for the children and their diseases, but they have little or no chance to interfere with the lives of adults.

"It truly looks as if it is going to be a losing fight for some time to come, for although some adults are making commendable effort to live sane lives, the vast majority seem very indifferent and many give apparently no thought whatever to habits which they clearly know are bad and which they know they could easily discard. There is surely no worse influence than that wielded by well-meaning authorities who go around airing their ill-founded beliefs that all is going well and that before long everybody is going to be living seventy-five to a hundred years!"

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### TO LIBRARIANS

The Bureau has available, a limited number of bound copies of Florida Health Notes. These bound volumes will be sent free of charge to librarians, health and other organizations as long as the supply lasts.

**BUREAU OF VITAL STATISTICS**  
**PUBLIC HEALTH INSTITUTE**

The Public Health Institute will be held in Jacksonville, Monday, Tuesday and Wednesday, February 10-12, 1930; to be conducted by the National Tuberculosis Association and the Florida Public Health Association in cooperation with the Florida State Board of Health. Philip P. Jacobs, Ph. D., of Columbia University and the National Tuberculosis Association, is in charge of the course which will consist of lectures, discussions and field trips. The Institute is primarily designed for lay persons interested in health work and for professional public health workers interested in the underlying theory and the administrative and educational phases of their work. Tuition for the course will be \$5.00. A limited number of scholarships are available. All meetings will be held at the Mayflower Hotel, Jacksonville. For blanks, information, etc., address 4 East Bay Street, Jacksonville, Florida.

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**YALE ESTABLISHES MONKEY FARM AT  
ORANGE PARK, FLORIDA**

The Rockefeller Foundation has given \$500,000 to Yale University, New Haven, Conn., which will be used to establish a laboratory station on a 200 acre tract at Orange Park for the breeding and scientific study of anthropoid apes. A special laboratory will be built in which will be made a detailed observation of the habits, social relations, life history and the psychobiologic development of the chimpanzee, the gorilla, the orangutan and the gibbon. It is thought the exhaustive studies of anthropoids will be of great importance in connection with the program of the Institute of Human Relations at Yale. The studies will include problems in physiology, behavioral adaptivity, mental defects and diseases among the apes, and it will be under the general supervision of Robert M. Yerkes, Ph. D., who has been at work at Yale for five years on comparative psychobiology.

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The following tables indicate the number of deaths from certain diseases by months, for 1929 as compared with the previous year. (Provisional figures.)

**TYPHOID DEATHS**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
1929.....	2	4	5	11	8	11	13	6	4	5	4	73
1928.....	7	2	9	4	18	12	19	14	7	14	9	115

**MALARIA DEATHS**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
1929.....	24	7	15	14	30	36	60	57	68	65	33	409
1928.....	9	9	13	10	24	16	26	36	39	84	74	340

**DIPHTHERIA DEATHS**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
1929.....	8	6	3	3	.3	1	1	8	9	6	6	54
1928.....	13	7	4	4	5	2	6	8	4	7	6	66

## BUREAU OF VITAL STATISTICS

## \*PROVISIONAL MORTALITY FOR NOVEMBER, 1929

Int'n'l List No. (1920)	FLORIDA	Number of deaths		
		Total	White	Colored
1-205	ALL CAUSES.....	1,415	855	560
1	Typhoid.....	4	1	3
5	Malaria.....	47	29	18
6	Smallpox.....	0	0	0
7	Measles.....	0	0	0
8	Scarlet fever.....	0	0	0
9	Whooping cough.....	2	1	1
10	Diphtheria.....	8	7	1
11	Influenza.....	27	11	16
22	Acute anterior poliomyelitis.....	0	0	0
23	Lethargic encephalitis.....	2	2	0
24	Meningococcus meningitis.....	1	1	0
31-37	Tuberculosis—all forms.....	88	38	50
43-49	Cancer—all forms.....	79	63	16
54	Pellagra.....	24	9	15
57	Diabetes mellitus.....	12	8	4
70-86	Diseases of the nervous system.....	139	86	53
74	Cerebral hemorrhage, apoplexy.....	98	56	42
87-96	Diseases of the circulatory system.....	221	144	77
87-90	Diseases of the heart.....	199	128	71
97-107	Diseases of the respiratory system.....	81	45	36
100-101	Pneumonia—all forms.....	69	38	31
108-127	Diseases of the digestive system.....	121	79	42
113	Diarrhea and enteritis (under 2 years).....	17	10	7
128-142	Nonvenereal diseases of the genitourinary system.....	170	109	61
128-129	Nephritis—all forms.....	143	94	49
143-150	The puerperal state.....	20	16	4
INFANT MORTALITY				
Number of LIVE BIRTHS.....		2,231	1,497	734
Number of STILL BIRTHS.....		136	68	68
Number of DEATHS under 1 year.....		129	73	56
By cause: (deaths under 1 year).....		100	55	45
Infectious diseases (1-42, exc. 11 31, 37a).....		9	5	4
Respiratory diseases (11, 31, 37a, 97-107).....		14	7	7
Gastro-intestinal diseases (112, 113).....		13	4	9
Malformations and early infancy (159-163).....		65	40	25
Premature birth (161a).....		39	25	14
Injury at birth (161b).....		7	4	3

## ALL CAUSES, BY AGE

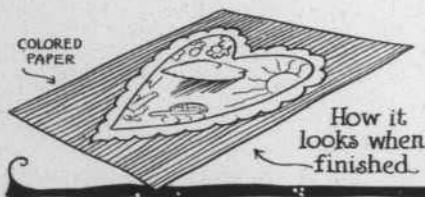
Age	Deaths	Ages	Deaths	Ages	Deaths	Ages	Deaths	Ages	Deaths
1	129	1	33	2	10	3	8	4	4
4	187	5-9	19	10-14	9	15-19	50	20-24	60
34	61	35-39	76	40-44	89	45-49	101	50-54	79
64	114	65-69	99	70-74	99	75-79	78	80-84	54
94	8	95-99	2	100-	4	Unk.	14		
Total									

Includes delayed Certificates

# A PAGE for the CHILDREN



Make  
Your Own  
"Good Health"  
Valentine!



Take your crayons and see how nicely you can color the pictures inside of the big heart. Then cut it out carefully along the "lace" outlines. Mount it on a larger piece of colored paper. Next, cut out the smaller heart (B) and paste the flap on space A in the large heart so you can lift it up to read the puzzle message. Do this by holding the paper almost on level with the eyes.



# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

**STATE BOARD OF HEALTH  
JACKSONVILLE, FLORIDA**

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

MARCH, 1930

No. 3

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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#### SPECIAL ARTICLES

THE CIRCUS—*Hanson*

MAY DAY — *McLaughlin*

HEALTH PICTURES—*Brink*

MOSQUITO MEETING — *Filby*

AGE GROUP, 1 to 4, Inc.—*Thompson*

THE FUNCTION OF A STATE LABORATORY—*Eaton*

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\*Field Supervisor

## ADMINISTRATION

### Henry Hanson, M. D., State Health Officer

#### THE CIRCUS

The Staff of the State Board of Health has enjoyed a visit from Mrs. Walter McNab Miller of the American Child Health Association and the White House Conference Committee.

Mrs. Miller is in Florida in the interest of organizing a State Health Council which shall cooperate with the official Health Department and actively support the program of the Health Officer. Mrs. Miller has manifested a keen interest in the screening and sanitary privy demonstrations which will be made in the western portion of the State. The object is to show the farmer how he can, at a low cost, protect himself from malaria and hookworm infection. At this demonstration the Bureau of Engineering will screen and paper a house and build a "State Board of Health Sanitary Privy" without expense to the farmer where this is done.

The Bureau of Communicable Diseases will hold an immunization clinic giving typhoid inoculations and toxin antitoxin (against diphtheria) to all who wish to take advantage of the opportunity to protect themselves.

The Bureau of Child Hygiene and Public Health Nursing will be present to examine the children and give advice to mothers in the care of the babies.

The Laboratories will have representatives there to show how you find out whether you have hookworms or malaria or whether your "blood is good."

This will be a circus with barbecue, moving pictures and everything which can be thought of to improve the health and wealth of the State. All members of the State Board of Health will be present. Governor Carlton, Mr. Cawthon, State Superintendent of Education, President Tigert and all the Governor's Cabinet will be invited to attend and join this big health crusade. A moving picture will be taken of activities.

The first demonstration will take place in Leon County, near Tallahassee on April 17th.

#### DRUG STORES

The attention of all druggists is invited to the following.

At a meeting of the Board of Pharmacy held in Gainesville, January 13-14, 1930, the following rule was adopted:

"Any person who is convicted or pleads guilty to the violation of any laws pertaining to Pharmacy in the State of Florida shall be forever barred from taking an examination or reciprocating. This shall apply to both proprietors and clerks."

Passed January 14, 1930.

(Signed) J. H. Haughton, Secretary.

Laws governing regulations and inspection of drug stores, Chapter 11859 (No. 54) Laws of 1927 and amended as in Chapter 13757 (No. 193) approved June 8, 1929, charge the Drug Store Inspector,

## ADMINISTRATION

working under the supervision of the State Board of Health, with duty "to see to the strict and proper compliance with the provisions of this act." This refers to the provisions of the law. The action of the Board of Pharmacy quoted above is independent of the law cited and is intended to aid in its enforcement.

### ANNUAL BOARD MEETING

The State Board of Health met in regular annual meeting in the office of the president of the Board at 200 E. Forsyth Street, Jacksonville, on February 11, 1930.

The entire Board, consisting of Hon. Chas. H. Mann, president, H. Mason Smith, M. D., W. D. Nobles, M. D. and Henry Hanson, M. D., secretary and State Health Officer, were present.

The auditor and four bureau directors were invited in to discuss special topics pertinent to their respective bureaus.

At this meeting the contract for biologics was awarded as follows:

1. Anti-rabic virus to the Medical Arts Laboratory, the Oklahoma Pasteur Institute, operating under U. S. Government License No. 98.

2. Other biologics, such as diphtheria antitoxin, tetanus antitoxin, anaerobic antitoxin (gas gangrene), antimeningococcus serum, vaccine virus (S. P.), Schick test material, toxin antitoxin (diphtheria), typhoid bacterin (plain and triple) to E. R. Squibb & Company of New Brunswick, N. J.

The purchase of quinine, carbon tetrachloride and silver nitrate will be from H. K. Mulford Company.

The manner of free distribution of therapeutic biologics is explained in the State Health Officer's letter to physicians reproduced below.

(Letter)  
BIOLOGICS DISTRIBUTION

Dear Doctor:

At the December meeting of the State Board of Health it was decided to abandon the policy of the free distribution of therapeutic biological products save for administration to those who are definitely unable to pay for them. This is in line with the general policy of the Board to confine its activities to prophylactic measures and not to enter the field of treatment. All physicians understand that certain deviations from this policy as in the case of hookworm disease and malaria are absolutely necessary for the time being but will be discontinued as soon as conditions warrant.

On and after the first day of February, therefore, the following items will be furnished only to physicians who will agree to furnish for each package of therapeutic serum used a "Certificate of Indigency" on the form provided on the package.

Diphtheria Antitoxin,	10,000 units
Diphtheria Antitoxin,	5,000 units
Tetanus Antitoxin,	20,000 units
Tetanus Antitoxin,	10,000 units
Anerobic Antitoxin,	10 c. c. package (Gas Gangrene)
Anerobic Antitoxin,	100 c. c. package (Gas Gangrene)
Antimeningococcus Serum,	30 c. c. package

*Are You Interested in Health Notes—See Page 45*

## ADMINISTRATION

The 1,500 unit package of tetanus antitoxin is regarded as a prophylactic measure and will be furnished free for all cases.

The other items which will be furnished free to all persons without the Certificate of Indigency are:

## **Vaccine Virus (Smallpox)**

#### Schick test material

## **Carbon tetrachloride (Hookworm)**

#### Toxin Antitoxin (Diphtheria)

Typhoid bacterin (plain and triple)

In addition to the items mentioned on this list, antirabic virus will be furnished without charge, but it will be necessary in each instance for the Board of Health to know the name of the patient receiving the treatment and the physician administering same.

The staff of the laboratory, which is charged with the administration of the regulation, will be grateful for your cooperation.

Respectfully,      Henry Hanson,  
State Health Officer.

## STATE CONFERENCE—SOCIAL WORK

The Florida State Conference of Social Work will be held in Jacksonville on April 7th, 8th, 9th and 10th, 1930.

The first two days of the Conference will be given over to an Institute which will offer three courses, i. e., Family Case Work, Institutional Administration and Child Guidance.

On the second two days the Conference proper will be held. This program has been developed under five heads, Dependency, Delinquency, Leisure Time Problems, Public Health and Mental Hygiene.

A consultant service of those conducting the Institute will be available, by appointment, to persons who desire it.

A registration fee of one dollar per course will be charged to those who attend the Institute.

## BUREAU OF ENGINEERING

**Ellsworth L. Filby, C. E., Chief Engineer**

## MOSQUITO MEETING

Once again our Florida Anti-Mosquito Association is planning to gather and renew old acquaintanceships, gather courage for the season's mosquito battle and learn the latest tricks discovered to keep up our eternal warfare on the pest that is largely responsible for Florida's present economic handicap — the hordes of *Taeniorhynchus* on the coasts, *Mansonia* in the central portion and *Anopheles* in the north and western areas.

*Complete the Coupon on Page 45*

## BUREAU OF ENGINEERING

Sarasota claims the meeting this year. Sarasota is down on the west coast where real mosquito control work is just beginning to get started. Ft. Pierce had it last year and for next year the bids are already in from Perry, up in the malaria section of the State.

April second and third are the meeting dates and headquarters will be at the Hotel El Vernona. Sessions will start on April 2nd at 9 a. m. Following registration and the regular session from 10 a. m. to 12:30 p. m., there will be a luncheon and an afternoon round table discussion on, "What can a community do to eliminate Mosquitoes." In the evening the annual banquet will be held. During the morning of April 3rd, a general discussion on "County-wide Control Problems" will be held, which will be followed by election of officers and adjournment.

Every woman's club representative, every year-round business man in Florida, every citizen interested in the progress of his community should attend the sessions. Plan now on being there: a worthwhile meeting is guaranteed!

### WATER WORKS MEN.- ATTENTION!

### ANNOUNCEMENT

The University of Florida through its Extension Division, the Florida State Board of Health and the Florida Section American Water Works Association will hold a four day short course on Water Purification and Sewage Treatment, at the University of Florida, Gainesville, April 8, 9, 10 and 11.

The short course school will start at 2 p. m., on the afternoon of the 8th and the Fifth Annual Meeting of the Florida Section American Water Works Association will start on the morning of the 10th. All sessions of the school will be held at the University of Florida, Department of Chemistry, under the direction of Professor A. P. Black and will consist of lectures, tests and demonstrations on water works and sewage problems, especially those relating to chlorination, coagulation, bacterial control and pumping problems. Registration for the school should be made now.

The headquarters for those in attendance at the school and meeting will be the Hotel Thomas at Gainesville and hotel reservations should be made promptly.

A faculty of men from all parts of the country will be present and water works men of Cuba have been invited to attend.

The Florida Section American Water Works Association will appreciate your giving this matter the widest publicity possible. The program will be issued later and information may be obtained from this Bureau, care of the State Board of Health, Jacksonville, Fla.

**BUREAU OF CHILD HYGIENE AND PUBLIC HEALTH NURSING****Clio McLaughlin, R. N., Field Supervisor****MAY DAY**

The year's at the Spring,  
The day's at the morn,  
Morning's at seven,  
The hillside's dew-pearled,  
The lark's on the wing,  
The snail's in the thorn;  
God's in his heaven,  
All's right with the world.

—Browning.

When any of us read the above lines, we usually have a feeling of satisfaction and happiness, the idea that spring is with us and all is well. It is spring that brings the budding of trees and flowers. The grass grows more rapidly and is greener, fruits ripen, and everything takes on new life. It is for this reason that Mr. Hoover has chosen May 1st as Every Child's Day—May Day, that all may be happy and rejoicing, that it may be a day of gladness for everyone, grownups as well as children since all of us have our share in this Celebration.

The daisy has been chosen as emblematic of May Day as it signifies innocence and power. The snow-white petals indicate innocence and the bright yellow center, success. It is for happiness, efficiency, and success that we are striving today. We are striving for strong, stalwart, straight thinking men and women, and only by laying a firm foundation can this be obtained.

We must yield to our children their birthright—health and education. By staying in the sunshine, playing active games, and mingling with others, children develop good, strong bodies and good, clean minds. Growing minds must be kept busy with something and if they are not guided in the right direction, then they, without doubt, turn to the wrong, which usually results in degeneracy and crime.

In order to promote a nation-wide interest in Every Child's Day, we are organizing a Child Health Council, similar to those in other states, upon which every state-wide organization, official or voluntary, will have a representative. This is a national organization and is an affair in which everyone must take part. Parents are most important in the celebration of May Day, for without right-thinking, happy parents, we do not get well-reared, happy children. A worthwhile individual means a help to his town, state, and community. So with the brains, work, and money, all of which we have in abundance in the state, let's all work together to organize the Child Health Council.

Each nurse on the staff of the State Board of Health is out in her district, working in the interest of May Day, so that every man, woman and child may know the significance of the words and make May Day a year-round celebration.

**BUREAU OF DIAGNOSTIC LABORATORIES****Paul Eaton, M. D., D. P. H., Director****THE FUNCTION OF A STATE LABORATORY**

It is through the Laboratory that the State Board of Health has its most direct contact with the medical profession. Other departments usually ask the physician for something. The State Laboratory offers to give him something. That is to say, service. In the early days of bacteriology, it was necessary for organized bodies such as health departments, state and city, because of the lack of private laboratories, to provide laboratory facilities for the profession at large. That this is true is shown by the fact that so many laboratories in the early days did tissue work, which has not been considered for some years to be a legitimate function of a state laboratory. It may be mentioned, however, that at the present time there is a movement back to the early custom in this respect.

The earliest services offered to the profession were the diagnosis by microscopic methods of diphtheria and tuberculosis. As medical science progressed, the diagnosis of malaria, gonorrhea and certain other conditions were added to this list. When the Wassermann test was first offered to the profession, since it was necessary for it to be done in a well-equipped laboratory, it was generally done by the state laboratories although it does not strictly belong to preventive medicine. The same may be said of its successor, the Kahn test, which is done in our laboratory. From a logical standpoint, the diagnosis of syphilis, by means of a dark field examination, belongs much more properly to preventive medicine than does the serum test, but it will be impossible for state laboratories to abandon the Wassermann test or some of its substitutes.

The laboratories of the State Board of Health of Florida have done a prodigious amount of work in addition to the serum test for syphilis. There are serum tests for typhoid, para-typhoid, typhus fever, Brill's disease, undulant fever and tularemia. Microscopic tests for tuberculosis, diphtheria, malaria, gonorrhea, rabies, and hookworm, as well as other animal parasites added, bring up the total to almost 100,000 tests a year in the central laboratory at Jacksonville. The branch laboratories have done a large amount of work which has been as varied in its character as the work done in the central laboratory. The removal of the Bureau of Vital Statistics from the central building to the Florida Theatre Building has made available one half of the space on the first floor of the building, most of which has been given to the laboratory. It is being fitted for laboratory purposes so that the work may be done in the most convenient manner possible. By the time another number of Health Notes appears, we will be able to report on the use of the new space.

In addition to the routine tests which we have mentioned, a state laboratory ought to be prepared to do a certain amount of research on new and imperfectly understood conditions as well as on certain problems which concern our state more than other states. In the first

**BUREAU OF DIAGNOSTIC LABORATORIES**

class, we might refer to the disease which has been called psittacosis which has been the subject of a great deal of newspaper notoriety within the past few weeks. Little is known about psittacosis although much has been written. There is even considerable doubt as to whether the bacillus psittacosis differs from certain other bacteria which have been more thoroughly studied. Although a state laboratory cannot be expected to go into research in the same way in which privately endowed laboratories might, it ought to be so equipped and staffed as to make it possible to do some work of this kind.

From another standpoint, the state laboratory should be used in some way as an educational center. Whether or not it would be possible to have a formal connection with the State University and thus train Florida students for this kind of work remains to be seen. An effort is being made in this direction. There is no reason why Florida students should have to go outside of the borders of their own state to become thoroughly proficient in public health laboratory methods.

**SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH, JANUARY, 1930**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	2202	853	98	272	333	3758
Diphtheria .....	504	175	66	174	41	960
Typhoid .....	362	137	10	41	42	592
Malaria .....	964	139	12	17	99	1231
Rabies .....	24	3		1		28
Tuberculosis .....	252	101	9	60	13	435
Gonorrhea .....	392	160	31	153	42	778
Kahn .....	3356	1769		651		5776
Water: Count .....		36		91	1	128
Water: Colon .....				111	1	112
Milk: Bacterial Exam. ....	96	181	100	291	22	690
Milk: Chemical Exam. ....	127	181	102	82	20	512
Miscellaneous .....	216	43	24	444	128	855
	8495	3778	452	2388	742	15855
Specimen Containers Distributed .....						8456

**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin.....	10,000 units	178	Packages
	5,000 units	66	Packages
Toxin Antitoxin.....		14940	C. C.
Schick.....		4950	Tests
Tetanus Antitoxin.....	20,000 units	25	Packages
	10,000 units	22	Packages
	1,500 units	1243	Packages
Anaerobic Antitoxin.....	100 c. c.	3	Packages
	10 c. c.	11	Packages
Typhoid Vaccine.....		2410	Treatments
Vaccine Virus.....		5150	Capillaries
Antirabic Virus.....		36	Treatments
Antimeningococcus Serum.....		3	Cylinders
Carbon Tetrachloride.....		2237	Capsules

**BUREAU OF COMMUNICABLE DISEASES  
F. A. Brink, M. D., Director****HEALTH PICTURES**

Everywhere the State Healthmobile goes there is an enthusiastic response. The children report that the "show" is well worth going to see. The teachers report an increased and more intelligent interest in health studies and more careful observance of the rules of hygiene. Why should it not be so? If we adults enjoy our world news, the latest novel or a good comedy on the screen more than we would in print, then we must expect our youth to want their health ideas garnished and embellished with comedy and human interest. This has been done in the health films.

**Interesting Movies**

"The Garden of Childhood" shows the normal play and work of the growing child, the happiness to be gained by developing good habits.

"Tommy Tucker's Tooth" deals with two boyhood playmates and advantages gained by one over the other largely because he used his toothbrush. This picture shows the scientific method of cleaning the teeth, the reason for doing it and the results of neglect.

There is a picture called "Life's Windows." It reveals the similarity between the eye and a camera, explains why some people do not see clearly and lets us into the secrets of better vision through the use of properly fitted glasses.

Then there are films that deal with malaria and expose the dark and villainous life of the mosquito with dagger-like lance, blood sucking hypodermic needle and connected poison gland containing, perhaps, the deadly germs of "Chills and Fever."

The hookworm and diphtheria pictures show, graphically, the life of the agents causing those diseases, also the methods and great benefits of prevention and cure.

There are other health pictures but these are the most popular.

**How to Get the Health Show**

If the Healthmobile has not recently visited your county we will be glad to date it up for a week. Your County Superintendent is best able to help procure the service because the pictures are shown mostly to school children, their parents and friends and the best place to come together, we find, is usually right in the schoolhouse. It is advisable to get in your application early, get the thing talked about a good deal in the schools and local papers and let everybody know about what a treat there is in store for them.

**TOXOID**

Through the courtesy of the Lederle Antitoxin Laboratories, the State Board of Health has received a supply of diphtheria toxoid sufficient for the treatment of 950 children. This is to be used in a limited area for the immunization of children from one to six years of age. Toxoid is given in the same way and for the same purpose as toxin-antitoxin. Two injections are reported to immunize about the same per cent of children as three of toxin-antitoxin and the immunity develops a little more rapidly.

**BUREAU OF COMMUNICABLE DISEASES****LOOKING BACKWARD OVER FIFTY YEARS OF HEALTH WORK IN FLORIDA. (A Review)**

Joseph Y. Porter was born in Key West in 1847, graduated from Jefferson Medical College in 1870, entered the Army the same year where he served until 1889 when he became the first State Health Officer of Florida. He held this position for 28 years, resigning to resume active military duty in the World War. He died in Key West in March, 1927. No history of public health in Florida can ever be written without giving liberal recognition to the outstanding service of Dr. Porter.

Beginning in the July, 1925, issue of the Journal of the Florida Medical Association, there was published serially, an article by Dr. Porter under the above title. The following review for Florida Health Notes is necessarily condensed and even more sketchy than the original article.

Neither the Constitution of 1838 nor that of 1868 made any provision for protection of public health but in the present Constitution, ratified in 1886, provision was made for "suppression of disease arising within or without the State." This was due to the insistence of Dr. John P. Wall, a member of the Convention from Tampa. Dr. Wall was a native of Hamilton County. The legislature of 1887 failed to make provision for carrying out this part of the Constitution.

In the campaign of 1888, Francis P. Flemming was a candidate for Governor. During his campaign he came to realize the difficulties of travel occasioned by the efforts to control yellow fever, which was epidemic that year. County Boards of Health had ample authority. Travelers were often stopped and sometimes turned back because the infection of yellow fever might lie hidden about their clothing. "Shot gun quarantine" was maintained by one county against another and armed guards were wont to impose restrictions we now know to have been useless. For example, flat cars of iron rails and a box car of ice were held up. Dr. Porter having been in contact with yellow fever patients was informed that he would be shot at if he attempted to go from Jacksonville on an engine to visit the sick in a community south of Baldwin. Thus it was that Governor Flemming's first official act was to call a special session of the legislature and get laws enacted providing for a State Board of Health. It was not, however, until the regular session of 1889 that the first board was appointed and Dr. Porter was selected as the first State Health Officer. This provision for protection to life and health is referred to as being essential to the development of the State's resources and to the welfare of her citizens.

It was during this yellow fever epidemic of 1888 that Dr. Joseph Y. Porter had been placed in charge of the Government Relief Service at Jacksonville where the municipal government and business affairs had become disorganized and conditions in general were serious. President Cleveland had authorized an expenditure of \$50,000.00 from a government emergency relief fund. Large donations came in from all parts of the United States and the Relief Service was thus enabled to do its work well. Under the direction of Dr. Porter, every house in Jacksonville was fumigated. The details of this task were carried

**BUREAU OF COMMUNICABLE DISEASES**

out by Dr. D. M. Eschemendia of Jacksonville and to this procedure is attributed the non-return of yellow fever to Jacksonville the following summer. This was ten years before the investigations of Reed and his associates had demonstrated the part played by the mosquito in the transmission of yellow fever.

After the epidemic and when conditions became normal a meeting was called and tribute paid to the many who had served so valiantly. To Dr. Porter was presented a beautiful gold watch, chain and fob which have now passed to his son to be handed down by him to succeeding generations.

The foregoing makes it clear enough why, at a time when the control of yellow fever was the paramount health problem, Dr. Porter was selected by Governor Flemming to be the first State Health Officer.

The chief concern of the State Board of Health then was to prevent contagious diseases entering the State by way of the sea. The greatest danger was that yellow fever might again be introduced from Cuba. With no precedent or guide to follow save those of the Monroe and Escambia County Boards of Health, the task was a difficult one. The seaboard counties, through their local boards had maintained a maritime quarantine and boarded vessels entering the several ports during the summer for the purpose of keeping out all individuals who might bring infection.

As soon as possible the new State Board of Health built quarantine stations at Pensacola, Tampa, Key West and Fernandina. These were equipped with the most modern machinery for disinfecting personal effects and fumigating ships and their cargoes. By act of Legislature, these stations were sold in 1901 to the United States and operated by the Marine Hospital service (now known as the U. S. Public Health Service). The State quarantine officials were accepted as federal civil service employees.

The Monroe County Board of Health in 1886 had permitted summer travel from Cuba if the crew and passengers of ships entering port had certificates to show that they were immune by virtue of having had yellow fever. Under similar restrictions travel between Havana and Tampa was permitted in the summer of 1887. The new State Board of Health after a conference of representatives from the principal cities and counties on the coast and along the railway, adopted the Monroe County plan and permitted travel under the "immune card" system.

It was gratifying to Dr. Porter when, in 1893 the Surgeon General called a conference of health officers from seaboard States and Cities and the principles of marine sanitation of the State Board of Health of Florida were approved and with but slight change made a part of the national quarantine law.

Shortly after the organization of the State Board of Health, the State was divided into districts and a medical man appointed as assistant for each of these districts. Most often one county constituted a district. These assistants were paid a per diem and expenses when away from home. The next step was the selection of district nurses to look after tuberculous patients and give instructions on prenatal care and child welfare.

(To be continued next month)

*Don't Miss the Next Issues of Health Notes—See Page 45*

**BUREAU OF VITAL STATISTICS**  
**Stewart G. Thompson, D. P. H., Director**

**DEATHS—AGE GROUP 1-4**



As this copy of the Health Notes goes to press, last year's mortality figures are not available. Before taking up results obtained from tabulations of the 1929 records, it has been deemed advisable to publish one more study of deaths by causes in a specific age group. One publication covered ages 20 to 59, inclusive; another 15 to 19, inclusive; and a third, 20 to 24, inclusive. A number of requests have been received for the percentage of deaths from leading causes in a pre-school age group. The two charts which follow were, therefore, prepared for age group 1 to 4, inclusive, by color and by sex for the ten leading causes of death—1928. The same information will undoubtedly appear at a future date for the calendar year 1929.

**NOTICE TO LOCAL REGISTRARS**

The signature of the undertaker or person acting as undertaker is very important. Where there is no regular undertaker or funeral director in charge, the signature of the person who acted as undertaker should appear on the death certificate. The word "None" should never appear in the space provided for the name of the undertaker or person who acted as such. When a body is interred, there is always someone who does the work. It is, therefore, improper to make a statement on the death certificate to the effect that there is no one acting as undertaker. This part of a death certificate is very important and is very often information quite necessary in adjusting estates, etc.

Please watch the certificates coming through your office and see that there is always a signature under item 19 which is provided for the name and address of the undertaker or person acting as undertaker.

**REVISION OF MAILING LIST**

Persons who desire to continue receiving Florida Health Notes are requested to fill in and return this form promptly.

Health Notes,  
 State Board of Health,  
 Jacksonville, Florida.

I desire to continue receiving  
 Florida Health Notes.

Name .....

Official Title, if any .....

Street or R. F. D. No. ....

Post Office..... State.....

## BUREAU OF VITAL STATISTICS

Leading Causes of Death in Age Group 1-4, by Sex,  
Florida, White Population—1928.

TOTAL WHITE	MALE	FEMALE
Diarrhea and Enteritis 23 %	Diarrhea and Enteritis 19 %	Diarrhea and Enteritis 27 %
Pneumonia 10 % (all forms)	Pneumonia 11 % (all forms)	Diphtheria and Croup 9 %
Diphtheria and Croup 8 %	Influenza 9 % (all forms)	Pneumonia 8 % (all forms)
Influenza 6 % (all forms)	Diphtheria and Croup 6 %	Malaria 7 %
Malaria 6 %	Malaria 6 %	Other General Diseases 4 %
Accidental Drowning 4 %	Accidental Drowning 6 %	Influenza 4 % (all forms)
Other General Diseases 3 %	Automobile Accidents 3 %	Intestinal Obstructions 4 %
Automobile Accidents 3 %	Poisoning by Food 2 %	Accidental Drowning 3 %
Intestinal Obstruction 3 %	Other Acute Poisonings 2 %	Automobile Accidents 3 %
Nephritis 2 %	Nephritis 2 %	Nephritis 2 %

**BUREAU OF VITAL STATISTICS**

Leading Causes of Death in Age Group 1-4, by Sex,  
Florida, Colored Population—1928.

TOTAL COLORED	MALE	FEMALE
Pneumonia 19 % (all forms)	Diarrhea and Enteritis 21 %	Pneumonia 19 % (all forms)
Diarrhea and Enteritis 17 %	Pneumonia 20% (all forms)	Diarrhea and Enteritis 12 %
Influenza 9 % (all forms)	Influenza 7 % (all forms)	Influenza 11 % (all forms)
Accidental Burns 5 %	Accidental Burns 4 %	Accidental Burns 6 %
Malaria 4 %	Automobile Accidents 4 %	Malaria 4 %
Diphtheria and Croup 4 %	Malaria 3 %	Diphtheria and Croup 4 %
Accidental Drowning 3 %	Diphtheria and Croup 3 %	Accidental Drowning 4 %
Whooping Cough 2 %	Tuberculosis (all forms) 3 %	Whooping Cough 3 %
Tuberculosis (all forms) 2 %	Syphilis 3 %	Tetanus 2 %
Automobile Accidents 2 %	Accidental Drowning 3 %	Tuberculosis (all forms) 2 %

## THE WORMY WAY

Problem in Multiplication

### HOOKWORM INFESTATION

40 Worms in each person.

9,000 Eggs laid daily by 1 worm

360,000 Eggs deposited daily by 1 person.

1,440,000 Eggs deposited daily by one family of four.

### HOOKWORM DISEASE

200 Worms in each person.

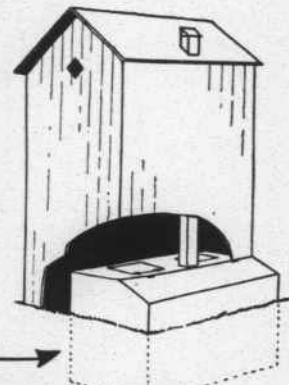
9,000 Eggs laid daily by 1 worm.

1,800,000 Eggs deposited daily by 1 person.

7,200,000 Eggs deposited daily by one family of four.

Eggs under normal conditions of soil and temperature develop into infective larvae in 120 hours.

Larvae may live 3 months but due to unfavorable conditions in nature this cycle is reduced to an average of about 3 weeks.



Problem Erased by →  
State Board of Health Sanitary Privy.



# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

**STATE BOARD OF HEALTH  
JACKSONVILLE, FLORIDA**

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

APRIL, 1930

No. 4

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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HEALTH NEWS — *Hanson*

LABORATORY NOTES — *Eaton*

THE HEALTH COUNCIL — *Blachly*

COUNTY HEALTH SERVICE — *Brink*

MARRIAGES AND DIVORCES — *Thompson*

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*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Ellsworth L. Filby, C. E.
Child Hygiene and Public Health Nursing.....	Lucile Spire Blachly, M. D.
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Crippled Children.....	F. L. Fort, M. D.
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Drug Store Inspector.....	H. R. Monroe
Drug Store Inspector.....	W. A. Mahoney

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Tallahassee.....	Elizabeth Byrd, B. S.
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\*Assistant Engineer

**PUBLIC HEALTH NURSES**

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Tampa.....	*Harriet J. Sherman, R. N.
Arcadia.....	Jule Graves, R. N.
DeFuniak Springs.....	Nanna Colby, R. N.
Eden, R. F. D. Jensen.....	Sarah Ida Richards, R. N.
Lake City.....	Frances Hall, R. N.
Madison.....	Thora Roberts, R. N.
Ruskin.....	Joyce Ely, R. N.
Starke.....	Mary G. Dodd, R. N.

\*Field Supervisor

## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### HEALTH NEWS

The United States Public Health Service's "Health News" M-317, in comparing communicable disease prevalence for the week ending February 26, 1930, with that of the week ending February 23, 1929, shows diphtheria and poliomyelitis still slightly dropping but depicts a general increase in measles, meningitis, scarlet fever and smallpox. The above is based on reports received from forty-six (46) states and ninety-six (96) cities.

We know quite conclusively how the communicable diseases are transmitted from one person to another in all except smallpox. We know it to be through secretion from the nose or throat. If perfect cleanliness were observed, if those who attended the sick washed their hands, scalded the dishes and gathered up all the soiled rags, or whatever material is used to receive the nasal or throat secretions, there would be no spread of such diseases. The soiled articles should be wrapped in a paper and burned either in a furnace or other adequate cremating apparatus. It is very unlikely that there would be any spread of these diseases if those in attendance, or who contact the sick, would always remember the importance of the use of soap and water after such contact.

The increase in smallpox simply illustrates the fact that there are still some people in this country who prefer to have smallpox. When this group decide that they no longer want this disease it will disappear.

### MALARIA IN THE UNITED STATES

"In connection with field investigations relating to public health problems, the U. S. Public Health Service points out that malaria was once prevalent in the northern United States. During the past 50 or 60 years it has greatly diminished and is no longer a serious problem there. In the Southern States, malaria has also decreased, but in many localities the rate is still high and constitutes an important sanitary problem.

"The liability of a serious increase of malaria in the North is not great so long as the present economic status of that region persists; in the South the danger of recrudescence of the disease is much greater, as the events of the past few years have demonstrated.

"The factors concerned in the diminution of malaria in the United States are interdependent; their importance has varied with time and locality, but all have been closely related to the agricultural development of the country.

"The study of the history of malaria in a country may afford useful information as to the best means of combating the disease. It

## ADMINISTRATION

is very desirable that such study be continued in this country, since, as the years pass, necessary data become more and more difficult to obtain."

To combat malaria in Florida more local health activity is required. All counties in the State with a population of 20,000 or more should have a full-time county health unit operating under the general supervision of the State Board of Health. Smaller counties could combine as a two or three county unit. In the northern portion of the state, malaria and hookworm are the most important points of attack.

## BUREAU CHILD HYGIENE AND PUBLIC HEALTH NURSING

Lucile Spire Blachly, M. D., Director

### PRELUDE—CHILD HYGIENE

As happens in the lives of individuals there recently came to me four opportunities in as many weeks to engage in educational health work, all attractive, all interesting, all having to do directly with the betterment of children—therefore, the race. Race betterment must come if our civilization is to survive.

After careful investigation and due consideration, I elected to come to Florida and my chief reason for so doing was that I hoped to have the opportunity to continue the constructive child hygiene program I had found beginning to work so successfully in my own state. My chief reason for this hope was that Florida heads up its State Board of Health with a man of character who not only has had sound academic and medical training but who also has had a long and successful career as a public health executive.

After a hurried, but nevertheless thorough, survey of Florida's social assets, I am even more encouraged. As I see it, whatever the future purpose of the Bureau of Child Hygiene may be, it must for the present play a dual educational role. It must educate to keep the well child well and educate to get the sick or defective cured if possible. To be effective it must begin its ministrations to the former with its conception. No single Bureau, no matter how adequately staffed or generously financed, nor no health department, can get very far without the whole-hearted interest and cooperation of the state-wide official and non-official agencies interested in the health and welfare of children.

It takes safe milk and safe water and safe sewage and green leafy vegetables and fresh fruit and fresh eggs and fresh meat and unspoiled grain and real butter and fresh air and the right temperature and sleep and biologics and chemicals and autacoids and physicians and obstetricians and pediatricians and nurses and nutritionists and educators and health educationists and sanitarians and dentists and social service work-

**BUREAU CHILD HYGIENE AND PUBLIC HEALTH NURSING**

ers and teachers and preachers and farmers and dairymen and fruit growers and economists and sociologists and statesmen and journalists and psychologists and psychiatrists and dental hygienists and county commissioners and city councils and school boards and public opinion and parents that care, all working and reacting together with complete harmony in the interest of the child, if we are ever to approach the ideal set us by President Hoover in:

**THE CHILD'S BILL OF RIGHTS**

(that)

"The ideal to which we should strive is that there shall be no child in America:

That has not been born under proper conditions.

That does not live in hygienic surroundings.

That ever suffers from undernourishment.

That does not have prompt and efficient medical attention and inspection.

That does not receive primary instruction in the elements of hygiene and good health.

That has not the complete birthright of a sound mind in a sound body.

That has not the encouragement to express in the fullest measure the spirit within which is the final endowment of every human being."

The little children are helpless. We are responsible for and to them. Shall they cry to us in vain?

**THE HEALTH COUNCIL**

My experience as a business woman, teacher, practicing physician and public health worker led me early in the last instance to see the need of bringing together the heads or representatives of the various state-wide official and non-official agencies interested in the child if we were to accomplish the most good in the least time with the least cost. Every other public health worker seriously interested in his problem and acquainted with the vast resources inherent in these various agencies sooner or later comes to the same conclusion but it was left to the American Child Health Association with its engineering head to develop the technique for making these councils function.

Before coming to Florida, the possibility of organizing such a Health Council here was gone into and soon after my arrival, Mrs. Walter McNabb Miller, Associate Director of the Division of Publications and Promotion of the aforementioned organization, arrived, coming on invitation of Dr. Henry Hanson. Mrs. Miller came not only

**BUREAU CHILD HYGIENE AND PUBLIC HEALTH NURSING**

as a representative of the American Child Health Association, but as the representative of the White House Conference by reason of her association with Mrs. Aida de Acosta Breckinridge, who is the Director of Public Relations, appointed to this position by Secretary Wilbur.

Fortunately, we found such a Health Council already organized but, unfortunately, inactive. Due to the splendid spirit of cooperation and confidence, one in the other, of the Governor, the State Health Officer, the Superintendent of Public Instruction, and the officers of the Health Council, it was easy for the former to get together a representative group of men and women in the Senate Chamber on February 25 to put new life and meaning in the Health Council and from that meeting to develop plans for the celebration of May Day—Child Health Day, at Gainesville, May first. This program will be broadcasted over WRUF from two to four p. m.

During the year, following the election of officers on May first, County Councils will be organized throughout the state. These County Councils will function in a number of ways, i. e., among others, they will receive and disseminate the information now being gathered by the White House Conference Committee and plan for and promote the year-around health programs to culminate in an appropriate celebration and stock taking on May Day of each year.

**BUREAU OF DIAGNOSTIC LABORATORIES**

**Paul Eaton, M. D., D. P. H., Director**

**LABORATORY NOTES**

In order that the members of the medical profession in the State of Florida, who depend upon the State Laboratory service for aid in the diagnosis of various conditions, may understand the difficulties under which the laboratory operates, it will be necessary for them to know something about the amount of work done.

At this time, we will only present figures for the Central Laboratory at Jacksonville, but we hope, in the near future, to present comparable figures for the branch laboratories. The subjoined table gives the total number of tests done in the Central Laboratory for each year from its opening in 1903 to the close of 1929. The last few numbers are given to the nearest thousand only.

When the Laboratory was young, a greater variety of work was done, as well as some work of an entirely different nature from that which is now carried on. I refer to tissue work or the histological diagnosis of diseased tissues. That kind of work is tedious and time consuming. It has not been done in the Laboratory for twelve or thirteen years. From these remarks, it will be seen that the number of tests during the past twelve years can not be compared directly with the numbers for the years previous to that time. But since 1917, at

### BUREAU OF DIAGNOSTIC LABORATORIES

least, the figures are directly comparable. It is true that technique has been improved and various tests have been simplified so that the actual amount of labor involved in doing, say, 1000 tests is much less than would have been required 12 years ago. Nevertheless, the figures speak for themselves.

The matter of greatest importance in the Central Laboratory is that the number of technical workers is exactly the same as it was 12 years ago. Clerical help has been multiplied by three. The clerks are busy all the time making records and getting out reports and from this fact it may be seen that the technical force is always very busy.

A little relief has come. In the latter part of February, an additional technician was employed, and it is hoped that within a few weeks another one may be added. This, however, will only furnish six workers for the amount of work that needs ten or twelve.

From the time laboratory work was first undertaken by the Florida State Board of Health, the budget has allowed the Laboratories an amount in excess of 10% of the total expenditures. This amount is evidently insufficient to provide the number of workers necessary. How it is to be increased is a matter to be determined. The activities of the other Bureaus cannot be curtailed for they, too, have their importance. The only way so far as we can see now, is to ask for a larger appropriation for the State Board of Health.

#### TOTAL NUMBER OF TESTS DONE IN THE CENTRAL LABORATORY FROM ITS OPENING IN 1903 TO THE CLOSE OF 1929

Year	Number Specimens Examined	Year	Number Specimens Examined
1903	996	1917	18,231
1904	2,088	1918	17,423
1905	2,896	1919	28,585
1906	2,802	1920	31,703
1907	3,202	1921	36,138
1908	4,006	1922	35,682
1909	5,762	1923	41,000
1910	12,096	1924	48,000
1911	10,576	1925	36,000
1912	11,006	1926	61,999
1913	14,516	1927	77,000
1914	14,593	1928	77,000
1915	19,708	1929	88,000
1916	19,749		

**BUREAU OF DIAGNOSTIC LABORATORIES**

**SUMMARY OF WORK DONE IN THE LABORATORIES OF  
THE STATE BOARD OF HEALTH  
DURING THE MONTH OF FEBRUARY, 1930**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	3197	605	60	163	147	4172
Diphtheria .....	778	162	14	267	9	1230
Typhoid .....	315	116	13	60	29	533
Malaria .....	953	145	13	15	99	1225
Rabies .....	15	3				18
Tuberculosis .....	204	89	14	78	16	401
Gonorrhea .....	365	131	29	132	38	695
Kahn .....	3101	1439		600		5140
Water: Count .....		36		77		113
Water: Colon .....				96		96
Milk: Bacterial Exam.....	65	170	6	311	22	574
Milk: Chemical Exam.....	94	181	7	70	22	374
Miscellaneous .....	163	62	29	546	223	1023
	9250	3139	185	2415	605	15594

Specimen Containers Distributed ..... 11001

**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin.....	10,000 units	134	Packages
	5,000 units	59	Packages
Toxin Antitoxin.....		5,926	C. C.
Schick.....		3,860	Tests
Tetanus Antitoxin.....	20,000 units	37	Packages
	10,000 units	46	Packages
	1,500 units	857	Packages
Anaerobic Antitoxin.....	100 c. c.	9	Packages
	10 c. c.	10	Packages
Typhoid Vaccine.....		1,258	Treatments
Vaccine Virus.....		2,690	Capillaries
Antirabic Virus.....		19	Treatments
Antimeningococcus Serum.....		25	Cylinders
Carbon Tetrachloride.....		4,357	Capsules

ALL REQUESTS FOR BIOLOGICS SHOULD BE DIRECTED TO  
THE STATE LABORATORY, STATE BOARD OF HEALTH  
JACKSONVILLE, FLORIDA

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****COUNTY HEALTH SERVICE**

The County Health Unit plan is growing in favor. The following is quoted from an editorial in the Memphis Times Scimitar:

"Counties that maintain full-time health units have made such progress in the prevention of disease as to convince the most obstinate that this work pays dividends in life, health and happiness, to say nothing of the commercial value of health to a community."

The best plan for the County Health Officer is to attack first one or a few of the major health problems of his community. Whether it is maternal and infant mortality, tuberculosis, malaria and hookworm, water and sewerage, or other factors that produce sickness, raise the death rate and tend to impoverish the people, the activities of a well directed health unit will quickly bring results. Mortality and morbidity reports year after year show marked improvement following the establishment of a county health service. Specific death rates from the preventable diseases have been reduced by as much as 87% for a four year period.

Malaria is said to have caused the downfall of nations. Hookworm disease has retarded the development of the entire south. During the Spanish-American War, more American soldiers were killed by typhoid than by bullets. Florida is a great state. On HEALTH more than anything else the continued growth and prosperity of every section and county depends. Many of us who know how to prevent disease are prone to neglect the simplest protective measures such as screening and sanitation.

**ENABLING ACT**

The writer firmly believes that there should be legislative authority for the appropriation and expenditure of county tax money for county health service.

**A HEALTH CIRCUS**

Watch your local paper for announcements regarding the Health Demonstration of the State Board of Health. By learning how economically to mosquito-proof your home, be it mansion or shack, you can save on the cost of screening and on the cost of being sick. By learning how to prevent soil contamination and doing it you can protect your children from hookworm and other diseases. Child Hygiene and Communicable Disease control will have a place on the circus program.

## BUREAU OF COMMUNICABLE DISEASES

Listen for further announcement by radio. Ask your neighbors if they are going. Plan on taking a day off for this big show and don't fail to bring the wife.

### LIFE SAVERS

The typhoid death rate per hundred thousand people in Florida has declined, according to provisional figures released by the Bureau of Vital Statistics, from 24.2 in 1917 and 27.3 in 1918 to 8.0 in 1928 and 5.3 in 1929.

In 1929 there were 83 deaths reported from this disease and that was lower by 38 than the figures for the previous year. There is a reason for this declining death rate, or rather, there are several reasons. Day by day and week by week the health workers are campaigning against disease. Doctors, nurses, sanitary officers of the State, county and city have the same objective and that is to improve the personal habits, the community sanitation and the general immunity of the people that they will not die or be ill from preventable sickness.

"It ain't the guns nor armament,  
Nor the funds that they can pay,  
But the close cooperation  
That makes them win the day.

It ain't the individual,  
Nor the Army as a whole,  
But the everlasting teamwork  
Of every bloomin' soul."

### HOOKWORM BLUES

A Gadsden County boy had been examined and told that he had hookworms. Returning home from the State Board of Health motion picture show, where he had seen the actual workings of hookworms fastened to the intestinal lining, he complained bitterly of abdominal pains and after much questioning he told his mother that "Those hookworms are hurting me."

Unfortunately, the hookworms do not cause abdominal pain. If they did, the victim's complaints would finally get attention and bring relief. The hookworm is stealthy. Its ravages are insidious. The juvenile victims do not complain but just pine away and too often the parents let them pine.

**BUREAU OF COMMUNICABLE DISEASES****LOOKING BACKWARD OVER FIFTY YEARS OF HEALTH WORK IN FLORIDA. (A review—Continued from last month)**

In Key West at the close of the Spanish-American War, when a large number of marines were quartered ashore and a fleet swung at anchor in the harbor, consternation was caused by the appearance of a disease at first declared to be yellow fever. This diagnosis, made by a young assistant surgeon of the Navy, was not accepted by the representative of the State Board of Health who declared the disease to be dengue, and subsequent developments proved him correct.

Another incident of interest was an outbreak of smallpox in Key West in 1896. The disease had gained considerable headway when discovered by the State Board of Health, and since the law compelled the board to care for, maintain and guard each patient, a pest house was prepared and all patients ordered removed thereto. The Mayor refused to carry out this order so the city was quarantined from the rest of the State. The Battleship Maine then in the harbor was assigned to help maintain quarantine. No vessel was permitted to leave without written permit stating that crew and passengers were satisfactorily vaccinated. One fateful afternoon there came a rumor that a steamer was aground off the main channel from the Gulf. A launch from the Maine, with a one-pound gun in the bow, was busy rounding up small craft that sought to go out to the steamer. A certain tug owner had boasted that his vessel would not be stopped if occasion arose to leave the harbor. His was among the other boats and being faster than the launch soon outdistanced the latter nor would he heed the blank shots fired from the launch. A blank was fired from the Maine without effect but when a shot was dropped just ahead of the tug it came "hard about," returned to port, the crew was vaccinated and a permit issued. That shot from the Maine had a most potent effect in enforcement of quarantine regulations in after years. Another smallpox outbreak appeared in the upper border counties during the 1901 session of the legislature. Food and medical care were still furnished so there was consolation if not a real advantage in having smallpox. Failing to get a compulsory vaccination law through the legislature the State Health Officer offered free vaccination to all, discharged the guards, furnished groceries only to the very poor and placarded all the houses where there were smallpox patients. Very soon was accomplished what the proposed law sought to do. People accepted protection, were vaccinated and the epidemic was terminated.

**The Health Train**

By authority of the 1915 legislature and with the cheerful co-operation of the railroads and the Pullman Company, a health train or moving school of hygiene and sanitation was fitted up and exhibited in rural communities wherever the rail lines ran. These were equipped with models and text cards to impart information; lectures and demonstrations were given on the different phases of sanitation.

Another enterprise for which credit seems divided between the Florida State Board of Health and Mr. Richard Dean, then general

## BUREAU OF COMMUNICABLE DISEASES

manager of the Pullman Company, was the installation in sleeping cars of the first dental lavatories.

### Laboratory Established

Not until 1901 was the State Board of Health Laboratory at Jacksonville opened with Dr. Edwardo Andrade as the bacteriologist. Branch laboratories were later established in the order named at Tampa, Pensacola, Tallahassee and Miami.

Hookworm disease was the next health problem to receive attention. Dr. Porter and his assistant, Dr. Hiram Byrd, made a trip of inspection to the western seacoast. They observed the effects of the newly discovered parasite on the children and many of the adults and were convinced that efforts should now be directed toward its eradication. Accordingly, Dr. C. T. Young and Dr. E. W. Diggett were sent out with thymol, portable microscopes and instructions to obtain results. The benefits of their effort were soon apparent but, as in more recent years, sanitation was neglected and re-infection resulted so that the benefits were not permanent.

Between the State Board of Health and the County Boards which were functioning prior to the establishment of the State Board of Health there seems to have been some overlapping or duplication of authority. This had to do mainly with maritime quarantine and restriction of travel during epidemics. On that account the legislature of 1897 abolished the County Boards of Health.

The last appearance of yellow fever in Florida was at Pensacola in 1905 where it was introduced by excursionists returning to that city after a trip to New Orleans. In the latter city the fact of its presence had been concealed. The Pensacola epidemic might quickly have been controlled but for a sudden exodus of panic stricken people from the section in which it first appeared. By this means a number of new foci were established and the epidemic lasted nearly three months. However, its spread was limited to a radius of ten miles beyond the city limits and for the first time in the United States yellow fever was conquered before the advent of the first frost. In this instance the campaign was based on the evidence of mosquito transmission gathered in Cuba by Walter Reed and his associates and was directed mainly against the mosquito carrier of the infection. Since that time the main objective of anti-mosquito work in Florida has been to destroy breeding places and screen against anopheles mosquitoes and the "pestiferous" varieties in order to control malaria and promote comfort. In this work Dr. Porter was actively interested almost up to the time of his death.

Of necessity, many interesting episodes and details contained in the original article have been omitted. Many readers of Health Notes will remember still other incidents and facts of real significance in their relation to the history of public health in Florida. Dr. Porter has given recognition to a number of men of national repute and to prominent citizens of the State who through their active interest in hygiene and sanitation, have contributed bountifully to the welfare and development of Florida. To all who are interested in a fascinating, romantic and soul stirring record of Florida health history, the reading of the original article is recommended.

**BUREAU OF VITAL STATISTICS**  
**Stewart G. Thompson, D. P. H., Director**

**MARRIAGES AND DIVORCES**



During the calendar year 1929, a total of 18,198 marriages was performed in the state of Florida; 10,474 white, 5,811 colored and 1,913 with color or race unknown. A total of 3,773 divorces and 20 annulments were granted. There is now on file in a central office a complete index of marriages, divorces and annulments beginning with the mid-year of 1927. Many attorneys, social workers, police courts and others requiring definite information concerning individuals in question have found the central record a short cut that has proven very valuable.

In the August, 1929 issue of Health Notes, under the caption "Marriages To Date", very brief tabulations were put on record dating from 1867 to the time the law centralizing the records went into effect. The table on pages 63 and 64 of this issue indicates the marriages performed and divorces and annulments granted, by counties, for last year.

**STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED  
BY THE ACT OF CONGRESS OF AUGUST 24, 1912.**

OF FLORIDA HEALTH NOTES published monthly at Jacksonville, Florida for April 1, 1930.  
 State of Florida

ss.

County of Duval

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared Stewart G. Thompson, D. P. H., who, having been duly sworn according to law, deposes and says that he is the editor of the Florida Health Notes and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Florida State Board of Health, Box 4479, Jacksonville, Fla.  
 Editor, Stewart G. Thompson, D. P. H., Box 4479, Jacksonville, Fla.

2. That the owner is: (If the publication is owned by an individual his name and address, or if owned by more than one individual the name and address of each, should be given below; if the publication is owned by a corporation the name of the corporation and the names and addresses of the stockholders owning or holding one per cent or more of the total amount of stock should be given.)

Florida State Board of Health, Box 4479, Jacksonville, Fla.

3. That the known bondholders, mortgagees, and other security holders, owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is: (This information is required from daily publications only.)

Stewart G. Thompson.

Sworn to and subscribed before me this 25th day of March, 1930.

A. Screen Dozier,  
 Notary Public for the State of Florida at Large.  
 My Commission expires October 4, 1933.

(Seal)

## LITTLE TALKS ABOUT BIG DISEASES

### WILLIE AND THE "SCHICK TEST"

**G**OOD Morning, Mrs. Green, I'm so glad to see you. I'm all upset. Sit down here where it's warm. I want to ask you something — wait till I find it. Where did I put that letter Willie brought home from school yesterday? Oh yes, here it is—now what do you make out of such as this?

*Dear Madam—that's me I suppose—The Sheek test is being given to children in No. 6 School next week. Tell me now will you, Mrs. Green, what's that got to do with Willie? He says they just stick a needle in you and it don't hurt a tall. They might have to stick pins and needles in him to find out, if he's alive, but he ain't no Sheek I can tell 'em without no test. I won't stand for none of this monkey business.*

Yes, there is some more to the letter—*This test, as you know—as I know—how should I know—is to determine whether or not persons are naturally immune \*\*\* In cases where the test is positive immunity is conferred by the toxin-antitoxin inoculation—and a lot more of such junk—and a place for me to sign yes or no about something. Tell me, Mrs. Green, has Willie been doing something that he shouldn't, or're the school people goin' cuckoo, or what?*

\* \* \* \* \*



You can't imagine what a load you've taken off my mind Mrs. Green. If these letters explained things as plain as you do, we might know what they're talking about. Your three children had it at School Number 5, and even the baby at the clinic, and he didn't even cry?

Ain't that wonderful! I guess I know all there is to know about diphtheria. Didn't my poor little Annie die of it ten years back?—"Croup"—old Doc Whoosis called it—the poor dear, she just choked to death right in front of our very eyes. When the Board of Health found out about it they were awful mad—said the case should of been reported. Some other children must of caught it when they came to see Annie. They roasted the old Doc good and proper—served him right. How did I know?

Well, if this Schick test and toxin-antitoxin, or whatever you call it, will keep Willie, or anybody else, from having diphtheria, I'm for it. I'll sign this blank quick and tell Willie to give it to his teacher the first thing in the morning. Just think, Mrs. Green, if poor little Annie could of had this she'd probably be with us now. I certainly learned something today. Thank you so much, Mrs. Green Good bye. Do come again.

## BUREAU OF VITAL STATISTICS

Marriages Performed, (by Color), Divorces and Annulments Granted,  
by Counties—1929

COUNTIES	MARRIAGES				DISSOLUTIONS	
	Total	White	Colored	Unknown	Divorces	Annulments
0. State.....	18,198	10,474	5,811	1,913	3,773	20
1. Alachua.....	403	192	211	—	61	—
2. Baker.....	203	23	6	174	4	—
3. Bay.....	133	65	67	1	17	—
4. Bradford.....	157	106	45	6	11	—
5. Brevard.....	150	82	68	—	35	—
6. Broward.....	622	462	160	—	41	—
7. Calhoun.....	98	65	32	1	5	1
55. Charlotte.....	83	58	25	0	11	—
8. Citrus.....	83	48	35	0	8	—
9. Clay.....	186	129	57	—	6	—
62. Collier.....	25	18	7	—	1	—
10. Columbia.....	234	125	107	2	28	—
11. Dade.....	1,250	929	321	—	587	2
12. DeSoto.....	105	70	33	2	14	—
56. *Dixie.....	120	—	—	120	13	—
13. Duval.....	1,758	1,079	668	11	685	7
14. Escambia.....	673	433	221	19	150	1
53. Flagler.....	87	59	28	—	2	—
15. Franklin.....	56	25	31	—	5	—
16. Gadsden.....	399	85	147	167	18	—
64. Gilchrist.....	61	40	16	5	5	—
57. Glades.....	59	24	35	—	3	1
65. Gulf.....	57	37	20	—	5	1
17. Hamilton.....	230	5	4	221	12	1
58. Hardee.....	170	139	30	1	29	—
63. Hendry.....	17	2	—	15	7	1
18. Hernando.....	86	54	31	1	13	—
59. Highlands.....	118	70	47	1	13	—
19. Hillsboro.....	1,647	1,306	340	1	487	—
20. Holmes.....	138	127	11	—	9	—
66. Indian River.....	83	43	40	—	8	—
21. Jackson.....	350	13	16	321	36	—
22. Jefferson.....	207	73	133	1	8	—
23. *Lafayette.....	63	—	—	63	5	—
24. Lake.....	250	127	122	1	57	—

## BUREAU OF VITAL STATISTICS

Marriages Performed, (by Color), Divorces and Annulments Granted,  
by Counties—1929—(Continued)

COUNTIES	MARRIAGES				DISSOLUTIONS	
	Total	White	Colored	Unknown	Divorces	Annulments
25. Lee.....	118	84	34	.....	48	....
26. Leon.....	257	94	162	1	55	....
27. Levy.....	163	88	75	.....	6	....
28. Liberty.....	37	21	11	5	1	....
29. Madison.....	296	162	134	.....	18	....
30. Manatee.....	218	136	82	.....	18	....
31. Marion.....	337	155	182	.....	33	....
67. Martin.....	81	46	35	.....	4	....
32. Monroe.....	146	125	21	.....	38	....
33. Nassau.....	202	128	74	.....	9	....
34. Okaloosa.....	211	.....	.....	211	13	....
54. Okeechobee.....	76	2	.....	74	9	....
35. Orange.....	513	299	213	1	168	1
36. Osceola.....	269	179	89	1	21	....
37. Palm Beach.....	526	301	224	1	147	1
38. Pasco.....	175	137	38	.....	30	....
39. Pinellas.....	609	470	139	.....	172	....
40. Polk.....	787	542	241	4	180	2
41. Putnam.....	220	91	129	.....	29	....
42. St. Johns.....	323	222	100	1	39	....
43. St. Lucie.....	99	58	38	3	26	....
44. Santa Rosa.....	281	3	2	276	11	....
60. Sarasota.....	146	99	46	1	54	1
45. Seminole.....	317	123	194	.....	41	....
46. Sumter.....	118	68	50	.....	25	....
47. Suwannee.....	211	115	90	6	21	....
48. *Taylor.....	183	.....	.....	183	18	....
61. Union.....	86	53	33	.....	9	....
49. Volusia.....	403	237	166	.....	101	....
50. Wakulla.....	76	56	20	.....	2	....
51. Walton.....	196	144	43	9	21	....
52. Washington.....	157	123	32	2	7	....

\* Figures from County Judge—original licenses not received.



# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912  
This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

MAY, 1930

No. 5

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

RABIES — *Hanson*

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MOSQUITO - PROOFING—*Filby*

LABORATORY TECHNIQUE—*Eaton*

WHITE HOUSE CONFERENCE—*Blachly*

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\*Field Supervisor

## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### MEETINGS

#### WHY so many meetings?

During the past month there have been meetings and conventions of many varieties, in addition to the regular established weekly club and church affairs. The promoters of each of these endeavored to make you feel that the future welfare of the race depended on the impression you carried away from these gatherings.

Among the gatherings within the past few weeks there have been the annual meeting of the Florida Federation of Woman's Clubs, the state convention of the Parent-Teachers' Association, The Florida Anti-Mosquito Association, The Southeastern Water Works' Association in conjunction with the Short Course in Water Analysis in a joint project with the Engineering Department of the University of Florida and the State Board of Health Bureau of Sanitary Engineering, and in Jacksonville, the Annual Conference of Social Workers of the State, besides the meeting of the Florida Bar Association and the Library Association. Most of these carried some phases of a health program and had one or more members of the State or City Health Departments actively participating in the deliberations.

The legal fraternity and the newspaper men did not invite any representatives of the Health Department, presumably because their deliberations were thought to have no bearing on policies affecting health and happiness; yet these two outstanding factors, as cogs in the wheel of government, are vital in an effective health program. The legal fraternity tells us the manner of procedure in guiding human beings to avoid illness in the quest for prosperity and contentment.

The library is our store house of knowledge. We go to it for the accumulated experiences of the ages. The men of the press gather and disseminate information and without them it would be difficult to carry on.

In what we regard as civilized countries it has been found that certain restrictions must be observed if social contact is to continue without punitive consequences; e. g., you cannot kiss a person who has diphtheria without taking the natural consequences if you have not in some way at some previous time been immunized against this disease. Hence, it is necessary to have health laws, regulations based on experience in the evolution of the human race which, if observed, will prevent the occurrence of diphtheria, typhoid, smallpox and all the ills which follow when infection is carried from person to person by unwise action.

All the meetings have had a common objective, prosperity, hap-

## ADMINISTRATION

piness and health. No one can be prosperous if constantly ill and he surely is not happy if always ailing. Health is, therefore, the keynote of all effort and indirectly the ultimate objective of the meetings.

Probably the biggest and most important of meetings was that of the State Health Council held in Gainesville May 1st—National May Day, Children's Day. A nation cannot be healthy and happy unless the children are healthy and happy.

## TUBERCULOSIS

Occasionally, reports come to the Health Department of a new cure for tuberculosis or of some physician who has developed a new method of treatment thereby arousing an unjustified optimism on the part of the unfortunate who have contracted this disease.

The person who knows that he has a tuberculous infection, whether it be of the lungs (consumption) or of the bones, glands or what not, we advise not to become despondent. The majority of persons who have reached adult age have at some time had an infection of tuberculosis in some part of the body. Those who have had proper food, adequate rest and a judicious amount of exercise and abundance of fresh air have overcome the infection and will continue well so long as they refrain from over-taxing the physical reserve which has been built up. In other words, lead a normal life, eat well, sleep well in an abundance of fresh air and work only up to the point of being normally tired but not to exhaustion.

Recently, the U. S. Government Food and Drug Department exposed the spurious claims of a patent medicine "B. M." a substance claimed to have curative powers by being rubbed into the skin.

Not long ago, it was reported that there were some injections which would bring about a cure. Health Notes does not know of any benefit to any tuberculosis patient as a result of the claims made by B. M. or the "new injections". More benefit will result by spending the money for good nutritious food, especially a good, pure quality of milk.

## RABIES

Letters have come to the office of the Board of Health reporting a serious rabies situation in some areas within the State. This should have the careful consideration of all, especially those having the duty of enforcing regulations affecting dogs, at times and in places where mad dogs have been found. No dog should be allowed to run at large unless it be properly muzzled. All dogs that have not been immunized should be immunized or killed without any further delay.

Health Officers, Sheriffs, Chiefs of Police and Constables will kindly note and put into effective operation means for preservation of life and human safety.

**BUREAU OF DIAGNOSTIC LABORATORIES****Paul Eaton, M. D., Director of Laboratories****NOTE ON TECHNIQUE**

For the benefit of laboratory workers and physicians who do their own microscopic work, we give a recent modification of the Wright blood stain which is at least fifty per cent better than the original.

A blood smear on a slide is flooded with the regular Wright stain which is a solution of certain dyes in methyl alcohol. The excess of solution is drained off, leaving merely what will cling to the slide when it is held at an angle of 45 degrees. The slide is then observed in a good light until it is seen to turn red when a few drops of distilled water are put on it and left for about a minute, when it is washed and dried.

If examined under the microscope at this point, it will be found to be overstained and probably marred with the precipitate, which is the worst feature of the standard Wright stain.

It is then washed with a solution of the same powder used in making the first stain in 85% ethyl alcohol. This washes off the precipitate and decolorizes the overstained smear. The slide may be decolorized, washed and dried any number of times found necessary to bring out the best detail.

Abstracted from the following article:

"A Blood Stain Giving More Constant Results." Roy F. Feemster, M. D., D. P. H., and Olive S. Feemster, A. B. From the Department of Bacteriology and Pathology of Tulane University of Louisiana.

Journal of Laboratory and Clinical Medicine, Vol. 13, Page 1139, September, 1928.

— : —

It is difficult, if not impossible, for outsiders to appreciate the amount of work done in the Laboratories of the State Board of Health. Doubtless, many of you have from time to time glanced over the statistical reports from the Bureau of Laboratories but mere figures give a poor idea of the actual conditions.

Let us take, for example, the amount of work involved in the doing of the 38,937 Kahn tests reported by the Central Laboratory in 1929. Each specimen must be centrifuged to separate the serum from the clot. The serum is then pipetted into a second tube in which it is inactivated, that is to say, heated to 56° C for 30 minutes. Measured portions of each sample are then put in each of four tubes which contain certain reagents.

The tubes, held in copper racks, are then shaken vigorously in

### BUREAU OF DIAGNOSTIC LABORATORIES

a machine constructed for the purpose, for three minutes, and another reagent is added. Each tube then must be scrutinized and the result of the test recorded.

From this resume, it will be seen that each test requires the use of 2 pipettes, and 5 tubes, not counting the pipettes used in the addition of the reagents above referred to. This means that this Kahn work alone required the use of 77,874 pipettes and 194,685 test tubes.

Now these tubes and pipettes had to be washed, cleaned, dried and in some instances, sterilized. The mere washing of such an amount of glassware is no small task.

When it is further considered that the Kahn tests referred to constituted about one third of the work done in the Central Laboratory, it will be seen that the staff of four technical workers did not have a great deal of spare time.

### SUMMARY OF WORK—MARCH, 1930

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	3975	1475	27	110	62	5649
Diphtheria .....	460	141	13	207	12	833
Typhoid .....	308	84	25	68	36	521
Malaria .....	674	128	24	20	92	938
Rabies .....	25					25
Tuberculosis .....	174	88	6	56	22	346
Gonorrhea .....	423	189	25	133	36	806
Kahn .....	3226	1362		629		5217
Water: Count .....		32		104		136
Water: Colon .....				127		127
Milk: Bacterial Exam. ....	59	175		319	23	576
Milk: Chemical Exam. ....	124	188	10	464	23	809
Miscellaneous .....	123	31	12	189	114	469
	9571	3893	142	2426	240	16452
Specimen Containers Distributed .....						13322

### BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	100 Packages
	5,000 units	9 Packages
Toxin Antitoxin.....		9,702 C. C.
Schick.....		3,650 Tests
Tetanus Antitoxin.....	20,000 units	10 Packages
	10,000 units	9 Packages
	1,500 units	862 Packages
Anaerobic Antitoxin.....	100 c. c.	21 Packages
	10 c. c.	26 Packages
Typhoid Vaccine.....		2,980 Treatments
Vaccine Virus.....		3,160 Capillaries
Antirabic Virus.....		26 Treatments
Antimeningococcus Serum.....		34 Cylinders
Carbon Tetrachloride.....		3,315 Capsules

**CHILD HYGIENE AND PUBLIC HEALTH NURSING****Lucile Spire Blachly, M. D., Director****THE AMERICAN CHILD HEALTH ASSOCIATION  
CONFERENCE FOR THE STATE MAY DAY CHAIRMEN**

Now that public attention is focusing upon the child in Florida as elsewhere, we believe the readers of this page will be especially interested in the recent conference for the State May Day Chairmen at Washington April 10 to 12.

Every state, including Hawaii and Porto Rico, was represented. Certain cities, including New York City, were also represented. The roll call of states, with each May Day Chairman responding with a brief report of the more important phases of old work finished and new work begun or to begin on May Day, was preceded by addresses by Dr. H. E. Barnard, Director, on the "Outlook of the White House Conference"; Dr. Pierce, Assistant United States Public Health Officer, speaking in the absence of Dr. Hugh S. Cumming, Surgeon General, on "A Rounded Health Program", and Secretary of the Interior, Dr. Ray Lyman Wilbur, on "The Opportunity Before Us."

Dr. Wilbur's address was the outstanding feature of the Conference, coming as it did the day after the signing of the Jones-Parker Bill which, after many years of legislative endeavor, initiates a better coordination of health activities in the several Federal bureaus. Dr. Wilbur believes stimulation for better health should come from the central government—stimulation of two sorts, leadership and money—but of the two, leadership is the more important. "I have a feeling," he said, "that we will never develop a real democracy unless we develop it with a local significance and interest," and again. . . . "If we are to succeed in the development of a large, wide-spread local interest, we must have a more unified program for education, health, and welfare and we must unite here in Washington on such a program and reflect out in the states whatever we may be doing and what we can do. Those of you who are primarily interested in education realize that education of the modern type cannot be disassociated from the welfare of the modern child and those of you who are interested in public health know that it cannot be disassociated from education and welfare. You know perfectly well that without health and education, you get nowhere in work for child welfare. . . . If we can all unite in a common program and secure legislation that is conservative and yet in the right direction, I think we can build on the coordination of effort and knowledge that the White House Conference will bring us, together with the general interest in this field, and so be able to develop in the course of a few years a substantial national program for the child that will be one of the glories of this country."

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

A luncheon at the Bureau of Home Economics was followed by a field trip to the Child Research Center at 1835 Columbia Road. Moving pictures of the routine of the child's day (child from two to four) together with certain scientific studies in child life the staff is now carrying on, featured this trip. At the dinner conference, Dr. Furnos, Assistant Commissioner of Health in Porto Rico, showed an excellent moving picture of certain phases of their public health program prior to the disaster. The eradication of hookworm and malaria and the improvement of infant welfare were particularly stressed.

The second day's conference was spent in visiting three very successful infant welfare centers conducted by the County Unit of Arlington County, Virginia, and in hearing Dr. William A. White of St. Elizabeth's Hospital on the subject of "Mental Hygiene". A tea at the White House closed the day's program.

At the Children's Bureau Saturday morning, William C. Carr of the United States Bureau of Education discussed "Methods of Equalization of Local Services"; Dr. J. H. Mason Knox, Director of the Bureau of Child Hygiene of Maryland, reported the results of the recent mortality survey made there and Dr. Adelaide Brown, a practicing obstetrician of many years' experience, also a member of the Board of Health of California, discussed the "Promotion of a Maternity and Infancy Program in a County Health Department".

In subsequent issues of Health Notes, more will be said of certain of these visits and discussions.

## BUREAU OF ENGINEERING

**Ellsworth L. Filby, C. E., Chief Engineer**

### SPRING HOUSE CLEANING

Are you prepared for spring floods and high waters with the possibility of a plentiful Anopheles mosquito crop in early summer? Every city can start now cleaning out ditches, opening up drains, providing quick runoff, and connecting up depressions so that the heavy down-pours will get away quickly. Every farmer puts his ditches in shape so his crops will not get drowned out. How about extending those ditches a little farther this year? Our city fathers can see to it that the city is made "spotless town" by cleaning up the old garbage dump or incinerator pile, picking up the discarded automobile skeletons and hauling them to a pit or cutting them up by acetylene torches and then getting rid of them by sale or burial. Pick up! Clean up! Spruce up! Keep down the pesky fly this year by removing all filth from the barns, stables, etc. Clean up the privy by building a new State Board of Health type privy. Don't delay for on this one thing may mean the life of your children. Hookworm and typhoid can be banished by the sanitary privy and modern sanitation. How about the school? Is the water supply safe to start with,

## BUREAU OF ENGINEERING

and then is it safely distributed to the children? Have they put modern plumbing in the school building or are the privies properly built and kept? Is your house screened? Think over the safeguards that protect you from disease. Are there any weak spots—weak links that disease can strike through and hit you or your loved ones?

### WATER ANALYSIS

Public water supplies are now required to be bacterially examined at least once a month by the State Board of Health at the Bureau of Engineering water laboratory. Strenuous efforts have been made to drive home to every public and semi-public water supply the desirability of having at least a monthly check on their water and we are gratified with the results. By educational methods, the big majority of the suppliers have been convinced and they have purchased their standard shipping container and are submitting samples every month. Through March, 1930, we have run 1,480 bacterial tests on waters of Florida. This exceeds the entire number of analyses made in the year 1925. Last year a total of 5600 tests were made—the greatest number ever made in a year by the Bureau. Is your water tested regularly? Ask your water superintendent!!

### MOSQUITO - PROOFING YOUR HOME

A new bulletin is just off the press carrying the above title and, in brief, it is a bulletin designed to make plain to the man in the country just how he can make his home mosquito-proof. In plain, simple language the making of screen doors and screened windows is outlined together with a description of the materials used, etc.

Attention is also directed to papering the houses so as to exclude mosquitoes. Details are given as to the protection of the fire place and chimney and tin-stripping openings in the floor.

But why mosquito-proof the home?

Logical procedure would be to keep the mosquitoes from breeding and this is perfectly possible for any organized, spirited community but we cannot economically bring about mosquito-free counties without excessive costs in most cases and so we reverse the attack and protect the dweller from the mosquito. The bulletin is illustrated by pictures of work done in Florida and details of construction of the U. S. Public Health Service type screen door. You can get a copy by writing for it. Any club, group or community can have a supply. Ask for Engineering Bulletin No. 5. Other booklets available for the asking are: "The Sanitary Privy," "The Filthy Fly," "Tourist Camp Sanitation," "The Sewage Treatment Tank (Septic Tank)," "Mosquitoes and Mosquito Control," "Malaria Catechism," "How Typhoid Fever is Caused."

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****WHAT OF THE SUMMER?**

Vacation time is upon us. Our college men and women are returning from months of toil pouring over books; soon all the public schools will be closed and our young people will be in a changed environment and engaged in new activities. Some will be in military camps, some in recreation camps, some in fishing camps, some in auto camps and some (quite a few, no doubt) will stay home and sally forth as often as possible in search of excitement and physical well-being.

The outcome of all this—whether the individual will profit from the vacation or be a loser—depends quite a bit on preparation. Vacation is like a football game. One who goes into it without proper training and equipment may expect to receive some painful jolts.

**Vacation Jolts**

SUNBURN can be avoided more readily than it can be cured. It is painful, harmful and quite unnecessary. The person who spends his first day at the beach or lakeside, basking in the warm, caressing (?) sunshine clad only in an abbreviated bathing suit, is likely to spend a week in misery, clad in blisters and cold cream. The slanting rays of early morning and late afternoon are relatively harmless. A much better tan can be developed by gradually increasing exposures, the pleasures of vacation are not so rudely interrupted and one avoids the appearance of having poor judgment.

CREEPING ERUPTION may be acquired by lying or sitting on damp ground or wading in pools contaminated with the excrement of cats and dogs that have hookworm. The hookworm eggs hatch in the soil and the baby worms enter the skin where they provoke this very distressing eruption. The veterinarian can rid the cats and dogs of their worms or the Humane Society can put them to sleep (the cats and dogs). Humans can avoid intimate contact with soil frequented by these domestic animals or they can take a chance and perhaps suffer very unpleasant consequences.

DROWNING is said to be an easy way to die but the pulmotor will not put life into a dead person and, while it is quite a pleasure to show off in the water it is no credit to a boy or girl if, by reason of cramps or something he goes to the bottom. Most drownings are the result of taking needless risks.

AUTOMOBILE ACCIDENTS can be avoided for the most part by careful driving. The driver who allows his attention to be diverted from his driving, who exceeds a safe speed limit, who approaches curves, crossroads or railway crossings carelessly, who takes chances in passing other cars or neglects to see that his car is in good order, particularly the brakes, is a menace to himself, his fellow motorists and everybody who may be on the highways.

## BUREAU OF COMMUNICABLE DISEASES

COMMUNICABLE DISEASES are more a menace in vacation time because of varied water and food supplies and more numerous and varied contacts with possible carriers. The vacationist will profit by avoiding such things as the common drinking cup, doubtful water and food, and mingling needlessly with dense crowds. The simple measure of washing the hands carefully before eating will afford additional protection. Vaccination, typhoid shots and diphtheria immunity are well worth having.

POISON IVY can be recognized and avoided. One not familiar with the plant should shun all three-leaved vines.

Florida has enjoyed almost complete freedom from smallpox for more than a year and a half. Diphtheria and typhoid prevalence has been the lowest in years. Measles, mumps, whooping cough and chickenpox have been more prevalent than usual. For the good of Florida we want to reduce to the minimum all communicable diseases. The doctors who report their cases and see that their patients do not spread disease will be doing a splendid service to their communities and to the State.

### TEACHERS COOPERATE

Some teachers urge their pupils to accept the protection (immunization) offered by the State Board of Health. Some will even go so far as to write a note to the parents urging them to sign the request slips so the children can be inoculated. There are still a few teachers who do not believe in immunization and the health officer can recognize one the moment he enters her school. Any teacher who by word or deed prevents a child from being immunized is morally responsible if that child contracts the disease from which he should have been protected.

### BROADCASTING GERMS

We know a man who, during an epidemic, refused to use the 'phone for fear of contracting infection. Much is transmitted now by wire and by wireless but germs travel no farther or faster than their human hosts.

Influenza, the swiftest traveling disease known, moves only as fast as the speediest means of human transportation which, in Osler's time, was the passenger train, and now would be the airplane. (And the airplane is something health officers must reckon with.)

Isolation of the sick, hygienic care, mosquito control, sanitation and immunization are yet the recognized measures for disease control. We do not have to cut the telephone wire or turn off the radio to prevent measles.

**BUREAU OF VITAL STATISTICS**  
**Stewart G. Thompson, D. P. H., Director**

**DEATHS—1929**



Last year, 18,155 deaths were registered in this state. The fact that the number of deaths did not increase over the previous year is not a surprise to those who have been watching conditions closely. Registration is just as complete and accurate as ever, if not more so. In the writer's opinion, it is not because of abnormally better conditions that such a marked decrease over the year

1926 has been recorded. When the official totals on population are available from the United States Bureau of the Census, which is under way as this Health Notes goes to press, it will not be surprising to find that where certain cities and counties have been expecting population figures to indicate a rapid growth, they will not go over the 1925 state census very much, if any. This, of course, is a forecast although based on a conservative survey of many influencing factors.

**MAKE NUTS PART OF DAILY MENU**

Nuts should be used as a food, not as a dainty, Lulu G. Graves, well known dietitian, advises in an article on nuts in the March issue of *Hygeia*, the health magazine published by the American Medical Association.

Nuts have a high protein and fat content and may be used as a substitute for meat, eggs, cheese and fish, according to Miss Graves. A few nuts added to almost any salad, dessert or casserole dish will improve it and will add considerably to the food value. Nuts in sandwiches, rolls and bread are always well liked.

Here is a recipe suggested by Miss Graves: sweet potatoes may be boiled, mashed and seasoned with butter, milk, salt and cinnamon. Then add a cup of walnuts (to eight potatoes) and turn into a baking dish. Cover with marshmallows and bake until the marshmallows are golden brown and puffy. Serve immediately.

**BRAN MUFFINS SUITABLE FOR DIABETIC PATIENTS**

The following recipe for bran muffins is one of a number suitable for persons with diabetes given in an article by C. D. Christie and E. M. Geraghty in *Hygeia*:

Take 3 eggs, 2 tablespoons butter, 1 level teaspoonful soda, 2 cups washed and dried bran, 1 cup sour milk or buttermilk and  $\frac{1}{2}$  teaspoonful salt.

Beat egg yolk. Melt butter and add to egg yolk. Mix soda and bran. Add bran and soda mixture alternately with sour milk to the egg yolk and butter. Add salt to egg whites. Beat egg white and fold into other materials. Put into muffin tins greased with mineral oil. Bake in hot oven until done. This makes twelve muffins weighing 30 Gm. each and giving approximately the following food value for each muffin: protein, 2 Gm.; fat, 4 Gm.; carbohydrate, 1 Gm.; calories, 46.

**BUREAU OF VITAL STATISTICS****WHAT DOCTORS HAVE DONE FOR CHILDREN**

Never in the history of the world have children been cared for with such tender consideration as in the present era. To many of us it may not occur that children have not always been so happy or so healthy as they are now. In the March issue of *Hygeia* Dr. John A. Foote traces the story of the child health movement and the physician's part in it.

Children died from smallpox by the thousands until Jenner discovered vaccination. Pasteur was not a physician, but the process of killing germs in milk which bears his name has saved incalculable numbers of children. Robert Koch's discovery of the germ of tuberculosis has made it possible to lower the death rate from 200 to 50 per 100,000 in twenty-six years.

Roux, von Behring, Schick, Park and Zingher are illustrious names that stand for the eradication of diphtheria. The work of the Dicks in scarlet fever, of Huldschinsky and Hess in the prevention of rickets by sunlight and cod liver oil, of Holt and Howland and Marriott in infant feeding—these are only a few of the great number that have contributed to the present safety and welfare of children. Every city and county health department has its unknown heroes who are doing their share of this vast work of saving children.

**NEW LOCAL REGISTRARS APPOINTED**

District No.	Name	Address
3-04	Mrs. Lyda L. Sharpe	Lynn Haven, Fla.
6-07	Thos. C. Moore	Oakland Park, Fla.
8-02	John J. Brown	Box 23, Homosassa, Fla.
11-07	Rothwell Lefholz, M. D.	New City Hall, Coral Gables, Fla.
14-207	Mrs. Nellie Edwards	Century, Fla.
22-01	Mrs. H. F. McClellan	Box 236, Monticello, Fla.
23-01	R. S. Green	Mayo, Fla.
27-02	W. B. Brantley	Williston, Fla.
33-01	Miss M. W. Starbuck	15 N. 5th St., Fernandina, Fla.
35-07	Miss Agnes Moremen	Maitland, Fla.
37-10	Miss Audrey Purdom	Box 84, Boca Raton, Fla.
39-06	Hampton E. Pedigo	Safety Harbor, Fla.
44-247	Miss Nannie B. Graham	Harold, Fla.
49-01	Peter Garside, M. D. C.	237 S. Grandview Ave., Daytona Beach, Fla.
51-117	Mrs. Mollie Jernigan	Freeport, Fla.
57-01	Hon. R. C. Vorhees	Moore Haven, Fla.
64-02	Mrs. Mary Roberts	Bell, Fla.
67-01	J. E. Morris	Box 878, Stuart, Fla.

## BUREAU OF VITAL STATISTICS

## Total Deaths by Color and by Counties, 1929

COUNTIES	DEATHS		
	Total	White	Colored
0. State.....	18,155	10,860	7,295
1. Alachua.....	480	228	252
2. Baker.....	92	55	37
3. Bay.....	132	96	36
4. Bradford.....	108	68	40
5. Brevard.....	161	90	71
6. Broward.....	214	118	96
7. Calhoun.....	69	52	17
55. Charlotte.....	33	29	4
8. Citrus.....	67	33	34
9. Clay.....	97	60	37
62. Collier.....	15	13	2
10. Columbia.....	248	138	110
11. Dade.....	1,372	958	414
12. DeSoto.....	134	95	39
56. Dixie.....	102	68	34
13. Duval.....	2,379	1,136	1,243
14. Escambia.....	652	411	241
53. Flagler.....	26	11	15
15. Franklin.....	56	22	34
16. Gadsden*.....	791	340	451
64. Gilchrist.....	43	31	12
57. Glades.....	26	16	10
65. Gulf.....	31	21	10
17. Hamilton.....	121	65	56
58. Hardee.....	81	67	14
63. Hendry.....	43	23	20
18. Hernando.....	57	39	18
59. Highlands.....	110	58	52
19. Hillsboro.....	1,599	1,116	483
20. Holmes.....	110	101	9
66. Indian River.....	60	34	26
21. Jackson.....	386	215	171

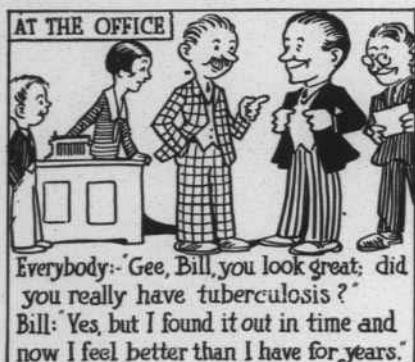
\*State Hospital Inmates Included.

**BUREAU OF VITAL STATISTICS**

Total Deaths by Color and by Counties, 1929. (Continued)

COUNTIES	DEATHS		
	Total	White	Colored
22. Jefferson.....	226	45	181
23. Lafayette.....	25	18	7
24. Lake.....	253	165	88
25. Lee.....	137	88	49
26. Leon.....	259	96	163
27. Levy.....	151	82	69
28. Liberty.....	51	35	16
29. Madison.....	203	91	112
30. Manatee.....	263	161	102
31. Marion.....	452	197	255
67. Martin.....	49	29	20
32. Monroe.....	192	136	56
33. Nassau.....	121	43	78
34. Okaloosa.....	100	86	14
54. Okeechobee.....	31	20	11
35. Orange.....	685	491	194
36. Osceola.....	190	133	57
37. Palm Beach.....	512	293	219
38. Pasco.....	168	131	37
39. Pinellas.....	793	654	139
40. Polk.....	731	503	228
41. Putnam.....	292	124	168
42. St. Johns.....	277	164	113
43. St. Lucie.....	75	46	29
44. Santa Rosa.....	122	75	47
60. Sarasota.....	133	93	40
45. Seminole.....	243	114	129
46. Sumter.....	102	57	45
47. Suwannee.....	181	109	72
48. Taylor.....	161	87	74
61. Union.....	96	36	60
49. Volusia.....	607	397	210
50. Wakulla.....	67	39	28
51. Walton.....	181	130	51
52. Washington.....	131	85	46

# BILL JONES COMES HOME



Everybody: "Gee, Bill, you look great; did you really have tuberculosis?"

Bill: "Yes, but I found it out in time and now I feel better than I have for years."



Bill: "I had a narrow escape, Doc, that examination you gave me saved my life!"

## A FABLE

ONCE upon a time there was a city with a street running along a high cliff. In dark and stormy weather so many people were injured by falling over the edge that the citizens gathered together to see what they could do about it. After much debate they decided to increase their taxes and build a hospital at the foot of the cliff so the injured might receive immediate attention.

Now, it chanced that a great physician visited the city and the officials showed him the hospital with great pride. But he, looking up at the cliff, said: "Wouldn't it have been better to build a wall along the cliff so the people couldn't fall off?"

**MORAL:** *Prevention is better than cure, and much cheaper in both lives and money.*



# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

JUNE, 1930

No. 6

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

MALARIA—*Eaton*

THE TAX OF DISEASE—*Brink*

NEW SCHOOL BUILDINGS—*Filby*

WHITE HOUSE CONFERENCE—*Blachly*

STATE HEALTH WORKERS ORGANIZE—*Hanson*

NATURAL INCREASE OF POPULATION—*Thompson*

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HENRY HANSON, M. D., STATE HEALTH OFFICER

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Chas. H. Mann, Pres.  
Jacksonville

## STATE HEALTH OFFICER

Henry Hanson, M. D.

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Communicable Diseases	F. A. Brink, M. D.
Engineering	Ellsworth L. Filby, C. E.
Child Hygiene and Public Health Nursing	Lucile Spire Blachly, M. D.
Accounting	Screven Dozier
Crippled Children	F. L. Fort, M. D.
*550 Local Registrars (County list furnished on request).	
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Drug Store Inspector	H. R. Monroe
Drug Store Inspector	W. A. Mahoney

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Tallahassee	Elizabeth Byrd, B. S.
Tampa	H. D. Venters, B. S.

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Tallahassee	A. P. Harrison, M. D.
Tampa	A. C. Hamblin, M. D.

## DISTRICT SANITARY OFFICERS

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Ocala	C. A. Holloway
Orlando	Russell Broughman
Punta Gorda	G. A. Renney
Tallahassee	C. N. Hobbs
Tampa	D. H. Osburn
	*Assistant Engineer

## PUBLIC HEALTH NURSES

Lake City	*Clio McLaughlin, R. N.
Tampa	*Harriet J. Sherman, R. N.
Arcadia	Jule Graves, R. N.
DeFuniak Springs	Nanna Colby, R. N.
Eden, R. F. D. Jensen	Sarah Ida Richards, R. N.
Lake City	Frances Hall, R. N.
Madison	Thora Roberts, R. N.
Ruskin	Joyce Ely, R. N.
Starke	Mary G. Dodd, R. N.

\*Field Supervisor

## ADMINISTRATION

Henry Hanson, M. D., State Health Officer

### STATE PUBLIC HEALTH ASSOCIATION

At Gainesville on May 1st and 2nd most of the employees of the State Board of Health and representatives of several City Health Departments met to consider the formation of a Public Health Association to be composed of persons actively engaged in public health work in Florida. Owing to short notice many of those engaged in county and city health work did not attend. Some of these had misunderstood the notice and thought that because they did not receive personal invitations they were not entitled to take part in the meeting. Such an impression is erroneous as it was the desire of the State Health Officer to have in attendance all persons engaged in public health work whether city, county or state. The object of the meeting was primarily for a round table discussion of the problems of preventable diseases which are met from day to day by those actively engaged in this work. It is hoped that all interested will attend the next meeting, which will probably be called in December in Jacksonville when the organization will be completed and a constitution and by-laws adopted.

The question of a name for the organization was discussed to some extent and it was suggested that the present Florida Public Health Association resume the name which it formerly had "Florida Anti-Tuberculosis Association" or some such name as the "Health and Tuberculosis Association" under which it can continue very valuable work quite as effectively as under its present name. This would eliminate much confusion which has arisen as some have taken its name to mean that it is a part of the official health agencies of the state.

The object of this new organization is more specifically for the discussion of scientific problems in health work both from a laboratory nature and as they are met in the field. The new organization will sponsor in every way possible the activities of the Tuberculosis Association and lend its moral support in every way possible to the Christmas Seal Sale and, in any other way in which it can, co-operate with the group which is more especially interested in the general tuberculosis problem.

From the standpoint of the writer it would seem that it is very important that those interested in tuberculosis should not delay in establishing their identity under a name which expresses more specifically their main objective. At the meeting referred to a motion was made and seconded that the official group organize under the name of the "State Public Health Association," but definite action was delayed pending such time as the present Florida Public Health Association may need to decide what it wishes to do in the matter of change of name.

The State Health Officer was elected temporary chairman of the new organization and Dr. Stewart Thompson, secretary.

## ADMINISTRATION

The health workers' group manifested great interest and a very lively discussion took place in connection with the impromptu program.

### FLORIDA HEALTH PROBLEMS AND THE HEALTH COUNCIL

The magnitude of the Florida Health Problems and their relation to the Health Council are such that one can only outline briefly those which should receive first consideration.

Geographically, Florida, as a whole, lies between 31 degrees and 24 degrees North Latitude; consequently, its most southern extremity is only one-half degree north of the Tropic of Cancer. Florida has temperate, sub-tropical and tropical climates and, consequently, health problems characteristic of each of these.

Among the health problems characteristic of temperate climates we have tuberculosis, typhoid, diphtheria and the usual run of contagious diseases. Among those commonly designated exanthemata, the diseases show a tendency to mildness characteristic of the tropical climates. As one approaches the tropics, scarlet fever and diphtheria as well as smallpox grow milder and scarlet fever is often so mild that it is difficult to recognize. Among the water-borne diseases of which typhoid is an example, there has been a satisfactory progressive decline during the twenty years that I have been familiar with the conditions of the state. This is due in a large measure to safe-guarding methods instituted by Mr. Filby of our Bureau of Sanitary Engineering as well as a natural supply of pure underground water, in most places supplemented by an intensive immunizing campaign conducted by our Bureau of Communicable Diseases under the direction of Dr. Brink. Smallpox continues sporadic and will do so until our people conclude that they do not wish to have this disease. Smallpox is a disease of personal choice and only those who want it, have it.

Our tuberculosis problem is of some importance, but it is no worse than in other states and it shows a more satisfactory rate than that of many. For example, the provisional figures for the calendar year of 1928 show a rate of 73 per 100,000 population, 45.9 for the whites and 134.3 colored. Our total deaths for the year 1929, (provisional figures), were 1,014, of which 416 were among the whites and 598 among the colored. The typhoid deaths show a total for the state of 83, among the whites 38 and 45 among colored. Owing to the fact that the present census figures are incomplete, no rates are given for the year 1929.

Diphtheria has decreased until we are soon approaching that theoretical point beyond which we will make no continued further

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reduction. Theoretically, it should be possible to eliminate diphtheria from our causes of deaths, but actually, so long as we continue to have those with us who do not believe in the germ theory and substitute prayers or absent treatment for toxin anti-toxin, or manipulate spines when anti-toxin should be given, we will continue to sign death certificates for babies and diphtheria will be the cause.

Tampering with health and sickness is another of the serious problems of the state. The laws which should protect our people against the unscrupulous exploiter of the sick are too lax; persons inadequately prepared are permitted to practice the healing art, notwithstanding the fact that they leave behind impoverished victims who continue to suffer, or are responsible for the erection of a series of tombstones as mute testimonials, monuments, to their skill and integrity. Our maternal death rate, the highest in this country, gives us no cause for pride, nor do we boast of having seventeen male midwives. These are matters to which the Health Council may well give serious thought.

Aside from the outstanding specific problems affecting both the health and the economic condition of the state, there are those of malnutrition and in using the term "malnutrition" here I have in mind the improper diets observed in many sections of our rural communities for both adults and children. It is strange that in a country where both climate and soil favor liberal variety of produce so few vegetables are grown and a comparatively very few people have a sufficient amount of milk. People who are not adequately nourished become a prey to infectious and debilitating diseases and make slow and poor recoveries when under treatment. It often appears that the foundation on which to build is lacking owing to the fact that the people do not produce the variety, quality and quantity of food needed.

In the tuberculosis problem, the Health Department is more interested in prevention than cure and so long as no adequate provision exists for the protection of children against infection, spread of bacilli by the careless, advanced cases, whether indigent or otherwise, will cause these young children to continue to become infected and complete the vicious cycle of more advanced hopeless indigent cases.

The immediate outstanding problems which have received considerable discussion of late are those of the prevalence of malaria and hookworm. From the health standpoint, the 452 deaths reported from malaria last year mean that there were something like 90,400 persons who had malaria in the state during 1929. Our laboratory statistics show that 25% of all colored children examined had hookworm and 28% of the white children as examined in the central laboratory had the disease. This includes a large number of negative

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specimens taken from cities where hookworm disease is rare. Surveys taken from country districts have shown a variation of from 25% to 80% of those examined to carry the eggs of hookworms. These diseases are tropical and the most debilitating with which we have to deal. An individual having malaria during the acute attack is entirely incapacitated for work and when the disease becomes chronic his efficiency drops to about 50%. In the case of the hookworm sufferer who actually has the disease the efficiency is usually about 33%. If one should go back to calculate on a financial basis what the loss is to the state from malaria one would, on the most conservative basis, be obliged to give not less than five days total loss in earning capacity for each of the 90,400 who had the disease, or a total of 452,000 working days lost. If one calculates a man's working year as 300 days, this would mean that one man would have to work 1,506 years to make up for the time lost during the one year 1929.

The menace from the spread of hookworm disease is equally appalling in that each female worm can deposit 9,000 eggs during each 24 hours and the number of worms in the individual varies, according to whether or not he has a simple hookworm infestation of from 25 to 30 or 40 worms or whether he is actually a sufferer of the disease where he may harbor 200 worms. We find that one individual may put out from 300,000 up to 2,000,000 eggs per day, which develop into infective larvae ready to penetrate the skin on the feet of the children who run barefooted about these rural homes where the sanitary toilet facilities are not in existence.

Time does not permit us to go into more extended detail, but it becomes apparent that there is a very definite and decided function for the Health Council in the sponsoring of activities for the correction of the most glaring of the defects first, and then of the comparatively minor but also important problems later.

On the great occasion of the celebration of Dr. Welch's 80th birthday on April 8th one paragraph of his response contains the following:

"While public health is the foundation of the happiness and prosperity of the people and its promotion is recognized as an important function of government, how wide is the gap between what is achieved and what might be realized, how inadequate is the understanding of the public concerning the means adapted to secure the best results, how small the attractions offered to those entering or who might desire to enter careers in public health through lack of suitable financial recompense, of security of tenure of office, of opportunities for promotion, of standards for eligibility based upon special training and experience, and of funds made available for the public promotion of health."

On this occasion President Hoover said:

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"No valuable change in everyday practice of any of the great arts has ever been made that was not preceded by the accretion of basic truths through ardent and painstaking research. This sequence that precedes effective action in medicine is equally important in every field of progress in the modern world."

The Health Council can be an instrument in the sequence which is to precede the effective solution of Florida's health problems, in bringing about cooperation and coordination of effort by official as well as non-official agencies.

## ANONYMOUS COMMUNICATIONS

Anonymous letters are received occasionally. Some of these have worth-while information while most of them do not, and are simply the expression of prejudice and spite work and consist of an effort to get someone in trouble.

Naturally such letters are thrown in the waste basket. If a letter is worth writing it is worth signing. We pay no attention to unsigned letters.

## NOW IS THE TIME TO TEACH VACATION

### HYGIENE

Health teaching may well be centered about vacation plans at this time of year, Prof. J. Mace Andress suggests to teachers in the monthly school department which he conducts in Hygeia.

Every vacationist is subject to more dangers during vacation than he would be at home. Students should be trained in the principles of safety to meet the common dangers incident to traveling on the highways, trains, boats and on foot. When accidents occur they should know the right things to do.

Dangers to health that meet the vacation seeker may lie in unsafe water and milk supplies and often in insanitary restaurants, fatigue and exposure. Training in personal and community hygiene is the best protection.

**CHILD HYGIENE AND PUBLIC HEALTH NURSING**  
**Lucile Spire Blachly, M. D., Director****CONFERENCE STATE MAY DAY CHAIRMEN**  
(Continued)

A great deal is now being said and written about mental hygiene. Almost everybody with the urge to make life more nearly worth living feels called upon to sponsor a movement or a cause or a reform or something, he hardly knows what, to bring about this happy result. Rarely does the reformer recognize the fact that in a large measure this urge in itself is a symptom of personal maladjustment and its exercise a type of occupational therapy. The popularity of the movement is evidence of its all but universal need. This interest has come through recognition of the fact that like most diseases, mental disease is much easier prevented than cured.

Dr. William A. White, Superintendent of St. Elizabeth's Hospital for the Insane, Washington, D. C., speaking before this Conference, briefly traced the growth of the movement from the time when an attempt was first made to improve the care of the insane, which led to the query: "Why do people go insane?" down through the interest in the neurotic, the socially mal-adjusted, then to those that are merely unhappy. Now it is found where adequate set-ups are available, that is, trained persons working together in groups, they have more than they can possibly do. Pretty nearly everybody is more or less unhappy, he said. "The aim of mental hygiene," he continued, "is to bring about efficiency, contentment, and happiness. . . . Mental disease as seen in adults is only an end product—an end product of years of bad living. . . . All mental maladies begin in childhood. . . . Trace any case of mental disease back and its origin is found there." He went on to say that mental disease is regressive. It is due to certain deficiencies in the individual. Certain sections in his development remain retarded. He reaches adulthood still infantile in some respects. "In putting up a fifty-story building considerable attention is given to the foundation. In building human beings, too much has been left to chance."

What are we going to do about it? Obviously we can't ever expect to have twenty-five-thousand-dollar-a-year set-ups scattered all around through the woods and over the prairies to prevent these mal-adjustments and yet that's where many of these things start. Like the weeds and the insects, children pop into being in the most unexpected places and at the most inopportune times. They are lucky if they have the care of the common garden variety of parents, the school teacher who is filling in the time between commencement and marriage, and the public health nurse who is expected to give more or less personal attention to 30,000 individuals annually. To this group, fortunately for an increasingly greater number, may be added the modernly trained pediatrician or his able substitute, the family physician, 1930 model.

In a later issue, something of the part each of these may play in the promotion of mental hygiene will be discussed.

**BUREAU OF DIAGNOSTIC LABORATORIES****Paul Eaton, M. D., D. P. H., Director****MALARIA**

In a drop of normal human blood, the size of a pin head, there are about 5,000,000 red cells. It is in these red cells that the organism which causes malaria lives and multiplies.

In order to examine the blood for malaria, the physician punctures the skin on a finger or an ear and collects a small drop of blood on a glass slide and then spreads it out thin so that the red cells lie not more than one layer thick on the slide. (There is a thick film method but it requires a very special technique). The cells are stained with a complicated anilin dye and are then ready for study under the microscope.

Under the high magnifying power of the microscope needed to discern the malaria parasite, not more than about 250 cells can be seen in any one microscopic field, that is in the part of the glass slide that can be seen under the microscope at any one time.

Assuming that a patient is anemic from malaria or from some other cause, his blood will contain from 3,000,000 to 4,000,000 red cells in each cubic millimeter, that is, in a drop about the size of a pin head. A little calculation will show that at any one glance the microscopist can see but

250                    1  
\_\_\_\_\_ or \_\_\_\_\_ of the whole drop of blood on the slide,  
4,000,000            16,000

so he would have to study 16 fields or 4000 red cells in order to see one tenth of one percent of the small drop of blood which was withdrawn for the test. When it is further considered that this small drop of blood is only about one five-millionth of the whole amount of blood in an average body I think it will be plain that in order to make the diagnosis of malaria easy there must be many millions of malaria parasites in the blood of the person under examination.

It is true that we sometimes find specimens of blood which show an average of one parasite per field. These fortunately are rare, for they are very bad cases. You can easily see that if one parasite per field means 16,000 parasites per cubic millimeter as was calculated above, and if there are 5,500,000 cubic millimeters of blood in the body, that means that such a patient was carrying in his blood

16,000 times 5,500,000 or

88,000,000,000 parasites.

With less severe infections the difficulty of proving the presence of the parasite increases. There are times when one may search a

**BUREAU OF DIAGNOSTIC LABORATORIES**

half hour or more, even repeating this on two or three successive days before finding the parasite. With many hundreds of such specimens coming into the laboratories it will be seen that the smallness of our force imposes a limit on the amount of time that can be devoted to each specimen.

And at the best, a negative report means only that we did not find the thing for which we were looking and not at all that it was not present.

**SUMMARY OF WORK—APRIL, 1930**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	4295	879	333	130	128	5765
Diphtheria .....	574	92	15	124	7	812
Typhoid .....	328	136	33	45	41	583
Malaria .....	841	143	33	11	125	1153
Rabies .....	18	5				23
Tuberculosis .....	223	71	15	84	33	426
Gonorrhea .....	429	181	36	112	43	801
Kahn .....	3496	1110		573		5179
Water: Count .....		49		135	1	185
Water: Colon .....				135	1	136
Milk: Bacterial Exam.	116	172	143	414	22	867
Milk: Chemical Exam.	153	198	143	138	22	654
Miscellaneous .....	128	39	23	489	33	712
	—	—	—	—	—	—
	10601	3075	774	2390	456	17296

**SPECIMEN CONTAINERS DISTRIBUTED 11430****BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin .....	10,000 units	62 Packages
	5,000 units	22 Packages
Toxin Antitoxin .....		7341 C. C.
Schick .....		2700 Tests
Tetanus Antitoxin .....	20,000 units	6 Packages
	1,500 units	965 Packages
Typhoid Vaccine .....		1488 Treatments
Vaccine Virus .....		3252 Capillaries
Antirabic Virus .....		47 Treatments
Antimeningococcus Serum .....		8 Cylinders
Carbon Tetrachloride .....		3841 Capsules

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director.****THE TAX OF DISEASE**

Like the cost of government, the cost of sickness must be paid. Graft and inefficiency may increase the cost of maintaining law and order in city or state until taxes become unbearable, or we may practice economy and maintain the governmental activities with a reasonable expenditure.

Likewise, in matters of health, because of indifference, carelessness or inefficiency on the part of the health department or the people or both, the cost of preventable sickness may go so high as to impoverish whole communities, even nations.

Time after time it has been demonstrated that good health is purchasable. Good health may be enjoyed in proportion to the amount of money expended wisely in the prevention of disease. Due to great differences in local conditions the cost of maintaining public health varies widely in different communities.

**The Handicap of Indifference**

Too often a great disaster is necessary to rouse the people to action. An oft repeated story in the history of public health is that of a great epidemic which awakens people and impels them to provide sanitation, vaccination or some effective means of preventing further sickness and loss of life from some communicable disease or other health hazard. Right here in Florida the value and effectiveness of control measures have been demonstrated repeatedly. Now the State Board of Health is pointing out the inevitable cost in dollars and human lives that may be reduced by certain inexpensive and reliable preventive measures. The only thing that can defeat their purpose is INDIFFERENCE.

**Screening Demonstration for Malaria Control**

It is an open secret that malaria has been taking an unusual toll in the South. Malaria can be prevented. Probably the most effective measure is to exclude mosquitoes from the house. Screening to protect the family is well adapted for the individual rural home. This can be done at a cost within the means of almost anyone. In the counties where malaria is most prevalent the State Board of Health is now demonstrating the most approved methods of mosquito-proofing the rural dwelling. Those who have attended these demonstrations have expressed their wonder at the simplicity, cheapness and ease with which it can be done. Occupants of the homes used for the demonstrations express surprise and great satisfaction at the comfort and restful sleep which they enjoy behind good screens without the necessity of keeping up a "smudge" all night long. They speak of the coolness and the fresh air, since they no longer have to swelter

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behind closed shutters to keep from being "eaten alive." They say they feel more like plowing and planting after this restful and refreshing sleep. ONLY ONE THING can prevent the rest of us from enjoying the same protection, that is INDIFFERENCE. Those who miss the demonstrations or postpone action will be the losers.

### The Hookworm Assessment

The demonstration does not stop with screening. A strictly sanitary privy is being built in each of the twenty counties selected for the demonstration. This is the type suited for the rural home. It will prevent typhoid fever, bowel complaint among children and the spread of intestinal parasites such as hookworms. It would be poor economy to spend three years fattening a wormy hog if you could fatten it in one year without the worms. You would act promptly on the farm expert's advice, give the hogs some worm medicine, clean up the pen and save many dollars per hog in feed. Do you think a wormy boy can plow corn or pass to the next grade in school as readily as he could if he were free from the handicap? Do you think the wormy girl will keep house as well, require so little in the way of cosmetics or marry as successfully as the bright, active, rosy-cheeked lass who has been protected from the dangers of disease, from retarded mental and physical growth, from anemia, even from mental defectiveness produced by hookworm disease and malaria? Isn't a child worth more than a pig, a man more than a hog?

If you did not attend the demonstration in your county, go and visit the premises and make careful inspection. You will be cordially welcomed by these new friends of the State Board of Health. You will learn something worth while.

Every case of malaria and every person with hookworms, every unscreened house and every insanitary condition in your community is a menace to you and your family.

### Schedule of Demonstrations

- Washington County—June 4th and 6th.
- Jackson County—June 11th and 13th.
- Holmes County—June 18th and 20th.
- Escambia County—June 25th and 27th.
- Suwannee County—July 2nd and 3rd.
- Alachua County—July 9th and 11th.

Watch your papers for further announcements. No matter what you do, what your circumstances, whether or not your house is screened and sewered, this is important to you. The prosperity of your community depends on the health of all of the people. Your interest and attendance, the knowledge you can gain, will help the cause.

**BUREAU OF ENGINEERING****Ellsworth L. Filby, C. E., Chief Engineer****NEW SCHOOL BUILDINGS**

If your school district is to vote on a new school building or has voted to construct one, you will be interested in a regulation passed by the State Board of Health early in 1930. The regulation is now in effect and requires submission of plans of school buildings to the State Board of Health for approval before contract for construction is let. The State Board of Health does not go into the structural safety of the building other than to ascertain if all doors open outwardly and that stairways and halls are ample in width. For school buildings that are now being erected, modern sanitary plumbing is recommended. This means that first the school must have a water supply that is taken from a safe source and handled correctly. If a city supply is available, it will, of course, be used. If there is no water supply nearby, then a well must be driven or drilled and a pump jack installed. The pump may be gas engine or electric motor driven. In many places small farm unit type outfits are employed taking power from a nearby line. Water is usually pumped to an elevated tank or a pressure tank for distribution about the school. The well should be properly cased and protected against back seepage. It should join the pump unit in an all metal, watertight union.

A word here might be of value. Many Florida waters are high in hydrogen sulphide and unless this is aerated out, excessive corrosion of pipes and fixtures may take place. So, before water supply well is accepted, check it for  $H_2S$  and also for iron. A simple iron test can be made. Collect a sample in a quart mason jar, shake it thoroughly and allow it to stand for a few days in the light. If iron is present in an appreciable amount, it will easily be noticed.

Piping should be of large enough size to give the pressure and volume necessary to operate the fixtures. This is important if flush valve operated toilets are to be installed. Enough water should be available to flush all the toilets, one right after another. Durable piping such as heavy galvanized piping or copper should be used. Care should be taken to have enough valves, mains, etc., inserted so that repairs can be made without cutting off the entire school.

Toilet fixtures should be of the standard flush type. Cheap fixtures will not be permitted as they do not give service. Seats must be of the half round or horse-shoe type. For the girls, a minimum of two stools must be provided and extra stools at the rate of one for every 15 pupils; for the boys, a minimum of 2, or one for every 20 boys, with a vertical type urinal of one stall for every 30 boys. Hand basins shall be provided at least one in each toilet room for every 50 pupils served. Cold water only need be provided. Liquid soap and paper towels shall be provided in each toilet room. If the

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school is to feature athletics, then showers should be provided, at least four in number for the use of the contestants. Partitions between fixtures are not required but the door opening into the toilet rooms shall open inwardly and be properly screened.

All toilet rooms shall have at least one large window opening to the outside and preferably two. Additional fixed glass openings may be provided for lighting purposes. All toilet rooms shall have artificial light units controlled from a wall switch near the door if the building is electrically illuminated. The floors shall be of concrete or other impervious material (not wood) properly constructed to drain to a central floor drain. Side walls shall be of impervious material at least six inches above the floor so that the room can be easily scrubbed or flushed out. If the structure is heated, a heating unit shall be placed in each toilet room.

Wood work and walls shall be painted with a light colored, washable paint. Glass used in toilet room windows shall be translucent.

All drinking fountains (a minimum of 2 per school of 4 rooms is required) shall be of the slanting jet protected nozzle type. They may be of the wall or pedestal type but shall be of the hand or foot operated valve type. Each fountain shall be so adjusted that when the valve is wide open the jet falls within the bowl of the fountain. Straight up bubblers will not be approved.

Sewage disposal shall be by connection to a sanitary sewer, if available, or through septic tanks of approved design and construction, properly located. The State Board of Health will gladly go over the project on the site and indicate to the designing architect the site for the septic tank. It is better to run a long line to connect to a sewer line than to build a tank so care should be taken in adopting a method of disposal. The State Board of Health furnishes model designs of septic tanks built in place.

The foregoing is given only as indications of what will be checked on the plans and what will be expected on the plans and specifications. The regulation is:

### RULE NO. 101

In accord with provisions of Chapter 6836 and 7822 Acts of 1915, Laws of Florida, the following regulations governing the Sanitation of School Buildings in the State of Florida have been adopted by the State Board of Health.

Section 1. All School buildings whether public or private in the State of Florida having four or more class rooms or accomodating more than 125 pupils shall be provided with adequate water supplies and sanitary facilities as hereinafter prescribed.

Section 2. Such schools shall be provided with an adequate

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supply of potable water under satisfactory pressure. Where municipal water supplies or deep free flowing wells are available, same shall be used. In the absence of such supplies, the schools shall be provided with necessary equipment, satisfactorily installed and operated to furnish at all times such school is in session an adequate supply of potable water.

Section 3. Such schools shall provide fixtures for the distribution of water of such design and construction as to prevent contamination.

Section 4. Such schools shall be provided with an adequate number of flush type toilets, urinals and lavatories of satisfactory design and construction properly installed and connected to the city sewer system or to a sewage treatment tank of design and construction approved by the State Board of Health.

Section 5. Any county school board, district trustee or any person, firm or corporation contemplating the construction of a building for school purposes in this state shall submit, before contract for construction is let, the plans and specifications of such building to the State Board of Health showing clearly all details of the water supply system including source of supply and also all details of the sanitary facilities, sewerage system and sewage disposal, for the approval of said Board and no contract shall be let until such approval in writing is obtained by the school authorities.

Section 6. That any public or private school now in operation in this state not conforming to any section of this regulation shall after due notice be given one year from the date of such notice to comply with the provisions of this rule.

Section 7. Any county school board, school trustee or any person, firm or corporation conducting any public or private school in this state who shall after being given due notice in writing, fail to comply with any sections of this rule shall be guilty of a misdemeanor and upon conviction thereof shall be punished as prescribed by law.

Section 8. Any public or private school in this state found to be in an insanitary condition or a menace to the health of the pupils may be ordered closed by a duly authorized officer of the State Board of Health after a thorough inspection, and any school so ordered closed shall not be reopened for school purposes until the conditions at fault are remedied.

Section 9. In case any section or sections of this rule are declared unconstitutional the same shall not invalidate any other section therein contained.

Section 10. This rule shall become effective March 1, 1930.

**BUREAU OF VITAL STATISTICS****Stewart G. Thompson, D. P. H., Director****BIRTHS—1929**

Everyone is interested in the census taking which means the counting of every human being in the United States. According to the records just compiled, the natural increase in Florida, which is the excess of births over deaths, indicates that we have 8,698 more persons, on this basis. The excess of births over deaths among the white population was 7,436 and the natural increase of the colored, shown by the excess of births over deaths, was 1,262.

During the calendar year 1929, a total of 26,853 births was put on file with the State Board of Health; 18,296 white and 8,557 colored. The number of births occurring has shown a decrease in fifty counties while an increase is shown in the number of births reported in 1929 over the year 1928 in the following seventeen counties: Baker, Bradford, Citrus, Collier, Dixie, Flagler, Gilchrist, Gulf, Hendry, Hernando, Liberty, Martin, Okeechobee, Seminole, Taylor, Walton and Washington. This decrease in the number of births registered is not affected by failure to report. The five hundred registration districts in Florida are more efficiently operated at present than at any other time in the history of the state. Local registrars, in many cases, have been in office as long as twelve years and have become very efficient in their efforts to secure cooperation from physicians and others who are required to make reports. Physicians, as a class, are reporting much more promptly than in previous years. Midwives, who are now very carefully supervised by the nursing staff of the State Board of Health, are also required to report promptly.

**METHODS OF REMOVING HAIR**

Measures for removing excess hair are discussed in the current *Hygeia* by Dr. Herman Goodman, a skin specialist well qualified to judge the efficacy of such procedures.

Many liquids and waxes are advertised as capable of removing hair permanently. There is no reason for optimism on this subject, for the hair does grow again, Dr. Goodman says.

Chemical depilatories are popular, but it should be remembered that the horny substance of the hair and skin are of the same composition. Whatever acts on the hair acts on the skin as well. Inflammations are likely to occur unless proper care is taken to remove the depilatory quickly and to cover the skin with ointment or oil. The only safe method is the use of the electric needle in the hands of a competent operator.

**BUREAU OF VITAL STATISTICS**

The following tables indicate the number of deaths from certain diseases by months, for 1930 as compared with the previous year. (Provisional figures.)

**TYPHOID DEATHS**

Year	Jan.	Feb.	Total	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	10	4	14											
1929	2	4	6	6	11	8	11	13	7	4	6	5	6	83

**MALARIA DEATHS**

Year	Jan.	Feb.	Total	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	12	12	24											
1929	24	7	31	15	14	30	40	65	59	72	71	40	33	470

**DIPHTHERIA DEATHS**

Year	Jan.	Feb.	Total	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	5	5	10											
1929	8	6	14	3	3	3	1	1	8	10	6	6	12	67

**TUBERCULOSIS DEATHS**

Year	Jan.	Feb.	Total	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	85	76	161											
1929	81	109	190	88	85	81	76	88	82	71	80	87	86	1014

**DANGER IN AMERICAN LIFE**

Danger of crushing personality is the most serious difficulty in American life today, says Dr. Ray Lyman Wilbur, Secretary of the Interior, in an article in the May issue of *Hygeia*.

We are in danger of becoming mere menagerie animals, caged, captured by ourselves. We live in shells made of steel, concrete, pavement, wires, artificial ventilation, artificial lighting. We drive out of this environment the trees, the flowers, the birds, the grass, the open spaces, the things that have always made life and happiness for the human being.

And if we make ourselves menagerie animals, the Secretary continues, what then? The menagerie animal doesn't breed well; it doesn't have vigor; it has too much leisure; it loafes; it wastes time; it gets fat; it is of no use in the long run in its biologic processes. That is the thing we face, he declares.

We must struggle all the time to uphold the dignity of the human being as such, Dr. Wilbur concludes. We must seek training adapted to the individual for the development of personality. We have to think in terms of selection, of segregation, if you please, of human qualities, or we may lose everything in the mass.

## BUREAU OF VITAL STATISTICS

Total Births, (exclusive of Stillbirths) by Color and by Counties, 1929

COUNTIES	BIRTHS		
	Total	White	Colored
0. State.....	26,853	18,296	8,557
1. Alachua.....	653	325	328
2. Baker.....	166	124	42
3. Bay.....	264	192	72
4. Bradford.....	177	134	43
5. Brevard.....	200	137	63
6. Broward.....	367	201	166
7. Calhoun.....	187	156	31
55. Charlotte.....	60	50	10
8. Citrus.....	106	59	47
9. Clay.....	102	79	23
62. Collier.....	27	23	4
10. Columbia.....	304	180	124
11. Dade.....	2,225	1,557	668
12. DeSoto.....	185	153	32
56. Dixie.....	112	80	32
13. Duval.....	2,945	1,924	1,021
14. Escambia.....	1,083	863	220
53. Flagler.....	45	21	24
15. Franklin.....	136	88	48
16. Gadsden*	689	272	417
64. Gilchrist.....	109	103	6
57. Glades.....	50	33	17
65. Gulf.....	74	52	22
17. Hamilton.....	183	94	89
58. Hardee.....	204	191	13
63. Hendry.....	66	65	1
18. Hernando.....	108	64	44
59. Highlands.....	197	149	48
19. Hillsboro.....	2,626	2,171	455
20. Holmes.....	248	245	3
66. Indian River.....	145	95	50
21. Jackson.....	740	430	310
22. Jefferson.....	343	70	273
23. Lafayette.....	54	49	5
24. Lake.....	394	274	120

\*State Hospital Inmates Included.

**BUREAU OF VITAL STATISTICS**

Total Births, (exclusive of Stillbirths) by Color and by Counties, 1929  
 (Continued)

COUNTIES	BIRTHS		
	Total	White	Colored
25. Lee.....	266	208	58
26. Leon.....	490	172	318
27. Levy.....	234	139	95
28. Liberty.....	121	77	44
29. Madison.....	382	150	232
30. Manatee.....	363	224	139
31. Marion.....	493	253	240
67. Martin.....	90	59	31
32. Monroe.....	255	197	58
33. Nassau.....	172	100	72
34. Okaloosa.....	198	179	19
54. Okeechobee.....	72	53	19
35. Orange.....	927	686	241
36. Osceola.....	139	99	40
37. Palm Beach.....	750	522	228
38. Pasco.....	186	155	31
39. Pinellas.....	868	637	231
40. Polk.....	1,427	1,109	318
41. Putnam.....	346	180	166
42. St. Johns.....	313	213	100
43. St. Lucie.....	130	86	44
44. Santa Rosa.....	282	246	36
60. Sarasota.....	208	165	43
45. Seminole.....	443	220	223
46. Sumter.....	178	108	70
47. Suwannee.....	297	172	125
48. Taylor.....	164	107	57
61. Union.....	129	95	34
49. Volusia.....	644	468	176
50. Wakulla.....	97	57	40
51. Walton.....	324	255	69
52. Washington.....	291	202	89

"We stop playing, not because we grow old; we grow old because we stop playing."

—Herbert Spencer.

# A PAGE for the CHILDREN

## PRIZE WINNERS IN OUR CONTEST for HEALTH LIMERICKS AND POEMS



Eat a little, chew a lot,  
Drink plenty of water cold or hot.  
Take many walks,  
And much sleep.  
This kind of living helps a heap.

— MARGARET FALLIN  
9 YEARS OLD

Our Tom had a very sore throat,  
He forgot to button his coat.  
That day to school he came  
His looks were not the same,  
The nurse sent him home with a note.

— SABINA SADOWSKA  
13 YEARS OLD



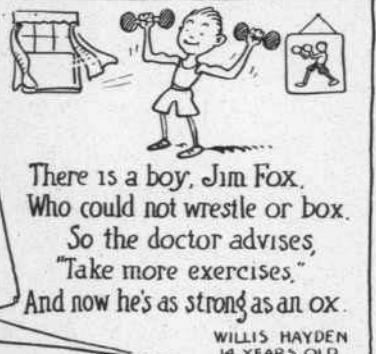
There was a boy, oh so thin  
He never had vigor and vim.  
When good food he ate,  
He gained normal weight,  
And since then real healthy he's been.

— HELEN HARRIS  
13 YEARS OLD



Old Ma Hubbard went to the cupboard  
To get her children some food.  
No flies were there  
It was dusted with care  
And all things were wholesome and good

— NO NAME SIGNED  
WHO WROTE THIS?



There is a boy, Jim Fox,  
Who could not wrestle or box.  
So the doctor advises,  
"Take more exercises."  
And now he's as strong as an ox.

WILLIS HAYDEN  
14 YEARS OLD

**MORE PRIZE-WINNING POEMS**  
will appear in a later issue of the Bulletin



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# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

JULY, 1930

No. 7

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

MEASLES—*Brink*

EXAMINATION OF MILK—*Eaton*

A HEALTHIER FLORIDA—*Thompson*

WATER PURIFICATION PLANTS—*Filby*

MATERNAL MORTALITY SURVEY—*Blachly*

STATE-WIDE HEALTH CONFERENCE—*Hanson*

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HENRY HANSON, M. D., STATE HEALTH OFFICER

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Henry Hanson, M. D.

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*Vital Statistics	Stewart G. Thompson, D. P. H.
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*550 Local Registrars (County list furnished on request).	
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Drug Store Inspector	H. R. Monroe

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\*Assistant Engineer

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\*Field Supervisor

## COUNTY HEALTH UNITS

Jacksonville T. C. Stoy (U. S. P. H. S.)

## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### STATE-WIDE HEALTH CONFERENCE

On June 12th, Governor Doyle E. Carlton presented one of the most important and vital problems in the future development of Florida when he convened a state-wide health conference at the Capitol. The purpose of the meeting was to inform the people of Florida as to the importance of securing a full time health service in every county within the state to the end that the enormous economic losses now sustained by reason of preventable diseases could be curtailed. To this meeting were invited the Governor's Cabinet, the State Board of Health and Directors of Bureaus, President and Executive Committee of the Florida Medical Association, President of the University of Florida and the Health Council, Regent of the D. A. R., President of the Federated Women's Clubs, President of the Parent-Teachers' Association, President of the State Chamber of Commerce, State Commander of the American Legion, State Governor of Rotary Club, State Governor of Kiwanis Club, State President of U. D. C., State President of Exchange Club, State President of Civitan Club, State President of Lions Club, State Commissioner of Welfare, President Florida State College for Women, President State Bankers' Association, President State Bar Association, President State Business Women's Club, President League of Municipalities, President Florida Public Health Association, President Anti-Mosquito Association, President State Press Association, President Florida A. and M. College and other prominent citizens.

The Governor presided at the meeting and in his address stressed the fact that the health of the people of Florida is their greatest asset, that he was intensely interested in making Florida the healthiest state in the Union and that this is one of the main objectives of his administration.

Dr. Julius C. Davis, President of the State Medical Association, spoke on the importance of the physicians of Florida realizing their individual and collective responsibility and obligations in the matter of promoting public health and stated: "In Florida, famous for its exposition of the superlative and modern civilization, we should be rid of the waste and inefficiency due to disease." He further detailed the loss in the value of lives from malaria last year as being \$2,350,000 to the state, a tremendous sum to pay for the privilege of having one disease.

Mr. Phil S. Taylor, representing Mr. Mayo, Commissioner of Agriculture, made a talk on "The Farmers' Need in the Conservation of Rural Health."

Dr. J. J. Tigert, President of the Florida Health Council, stressed in his remarks the importance of health to education and brought out

## ADMINISTRATION

the importance of having full time health service in the schools of the state.

Dr. N. A. Upchurch, representing the Florida League of Municipalities, endorsed the movement to establish a full time health service in every county of the state and pledged the League's cooperation.

Dr. Gerry R. Holden, of the Executive Committee of the Florida Medical Association, stated that the Committee was behind the movement and approved it fully.

Hon. W. S. Cawthon, State Superintendent of Public Instruction, stressed the needs of better health conditions throughout the state especially within the school and pre-school population and pledged the cooperation of his department to the fullest extent.

Dr. T. Z. Cason, speaking for the Florida Public Health Association, emphasized that only by community health work would real progress be made against tuberculosis.

Dr. J. R. E. Lee, President Florida A. & M. College, stressed the importance of consideration of the close relationship of health between the white and colored population and brought out the fact that disease knows no distinction of color or race and that we must eliminate it from both races to have a healthful state.

### Projected Rural Health Program

The writer then explained in detail the program which the State Board of Health desires to make effective as follows:

The State Board of Health after due consideration and study of the prevalence of preventable diseases throughout the state, especially in the rural sections, is convinced of the need of a full time health service in every community. The following plan for a full time health service will give the entire citizenship of our state a more effective disease control under modern public health administration and practices and will have as its objective the curtailment of unnecessary sickness and suffering and a saving of the enormous monetary losses now sustained annually throughout the state by reason of the prevalence of illness.

1. Objective:— A full time health service for the citizens of every county in the state to the end that preventable diseases may be more effectively controlled in Florida.
2. Budget:— A minimum budget of \$10,000 for a population unit of 15,000 or more with an assessed valuation of not less than \$6,000,000 to provide for the minimum unit. This budget to be based  $\frac{1}{2}$  to  $\frac{2}{3}$  of the amount being provided by the county, or counties if combined, and  $\frac{1}{3}$  to  $\frac{1}{2}$  by the State Board of Health.

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3. Personnel:— The personnel of the minimum unit for a county or for two or more counties combined into a district shall consist of one medical director, one public health nurse, one sanitary officer and one office clerk, all personnel to be trained in public health administration and practice before appointment. The director of the unit is to be appointed by the County Commissioners upon recommendation and with the approval of the State Health Officer.
4. Activities:— All full time health units shall conduct a well rounded scientific program of education of the cause, methods of transmission and prevention of preventable diseases prevalent within the community served, and demonstrate practical application of scientific methods of control. The following are some of the important activities that should be conducted by the unit.
  1. Control of all contagious and infectious diseases, including necessary isolation, immunization and supervision of contacts and education of the public relative to the disease present.
  2. Medical inspection of all school and pre-school children to be conducted systematically, supplemented by a proper nursing program which should have as its objective to secure correction of remediable defects and personal hygiene education.
  3. (a) Tuberculosis control with early finding clinics, prompt follow-up of the suspicious cases and getting them in the hands of their family physician at earliest moment for treatment. (b) The open case often hopelessly beyond possibility of cure should be isolated.
  4. Inoculation and immunization of the entire population according to age groups and necessity thereof against typhoid fever, diphtheria, smallpox, etc.
  5. Sanitation of premises, which should include an approved method of excreta disposal, a safe water supply and protection against flies and mosquitoes.
  6. Child hygiene to be worked out to meet the local conditions and carried on both by the director and nurse.
  7. Venereal disease program with clinics and treatment facilities when recommended by the local medical society and to be undertaken when conditions warrant.

The program of activities of each unit will be presented to the local medical society for approval. Changes, when necessary to meet local conditions, will be recommended by State Board of Health. To make possible the projection of a full time health service for every community the following objectives will be necessary, and active co-operation of all citizen groups will materially assist the State Board of Health in the development of the program.

**ADMINISTRATION**

1. An enabling act, to enable county and city commissioners to make appropriation for full time health service as a part of their local government.
2. State financial assistance to counties to stimulate their interest in protection of the health of the citizenship.

A communication from Mr. Chas. H. Mann, President of the State Board of Health, read by Mr. B. A. Meginniss, representing Kiwanis Club, indicated strongly the desire of the State Board of Health to make Florida the healthiest playground of the world. Mr. Mann stated in part: "Only a few years ago many diseases were looked upon with dread as they swept communities and nations, taking a staggering toll of human life. Today smallpox, and yellow fever, the effects of which we have experienced in our own state in years past, have been practically banished from civilization. \* \* \* Typhoid, deadly in character only a few years ago, can be prevented through inoculation and modern sanitary measures. \* \* \* Diphtheria has taken the lives of untold thousands of children in the past but is no longer looked upon with the same degree of terror. Science has found a way to annihilate its potency through serums. \* \* \* Malaria in our state, however, is on the increase and a further increase may be expected if immediate steps are not taken to combat energetically its ravages through sanitation and control measures. \* \* \* Hookworm is one of our most widespread diseases. It lowers the resistance to other infection and destroys the economic power to earn a livelihood. \* \* \* Florida has its full share of this malady. This can be successfully combated through medical and sanitary measures. \* \* \* Florida, the playground of the nation, should be vitally interested in all matters pertaining to health. Thousands of visitors enter our state yearly, some to enjoy our balmy climate, others to make their homes. The revenue to the state is enormous and the influx of tourists and home seekers will increase provided health conditions can be maintained at a high standard. Every county in our state that expects to benefit from tourists and increasing population, must have its house in order, and no better method can be inaugurated than to establish its own County Health unit for the service of its citizens, in order that the health of the county may be conserved. If every county in the state would make health protection an important part of county government, it would produce results far in excess of its fondest hopes, would pay big dividends and make Florida one of the greatest states in which to live, and attract thousands of people and millions of dollars. It is estimated that sickness in Florida at the present time costs its citizens \$15,000,000.00 per annum. These figures are considered conservative by competent authorities. \* \* \* Your State Board of Health will assist you in every way possible to make your community immune to disease. Health is Florida's greatest asset and every citizen should feel it incumbent upon him to do his part in assisting in the carrying on of every health program that may be prescribed. \* \* \* His Excellency, Doyle E. Carlton, Governor of Florida, is very much interested

## ADMINISTRATION

in the health work of our state and is doing everything in his power to promote the health and happiness of our people, as he realizes that it means a conservation of Florida's greatest assets—capital and labor."

Senior Surgeon L. L. Lumsden, U. S. Public Health Service, representing the Surgeon General, stated in part: "The Public Health Service regards this as a historic episode in the affairs of this country. I do not know of any other Governor having called a conference of this kind nor any who so clearly grasps the fundamental importance of health service to the people of his state so I wish to pay my respects to the Governor of Florida who has seen one of the foremost duties of a statesman. \* \* \* Public health work has been defined as 'public service for the conservation and promotion of health and for the prevention of disease and premature death.' Its aim is 'to make growth more nearly perfect, decay less rapid, life more vigorous, death more remote.' \* \* \* This has heroic sound but it not only is possible but is an absolutely demonstrated fact. \* \* \* You, in Florida, have one of the greatest opportunities in the world of public health service administration, that of demonstrating what public health service does and can do when properly administered. You are beginning a new era. With Governor Carlton's leadership and under Dr. Hanson's business-like administration I prophesy a brilliant success. I am impressed with the ability of Dr. Hanson to get cooperation from outside agencies. \* \* \* There are certain communicable, preventable diseases which have come to you in the South and you have, unfortunately, and to a large extent undeservedly, a reputation for unhealthy conditions in Florida, Alabama and Mississippi. I am much interested in that statement for as a matter of fact if you will look into mortality records you will find that in comparable economic and social groups the death rate in the South is lower than in the North. It so happens that these diseases which are peculiar to the South are those most readily controlled. It is easily within your power to reduce malaria, hookworm, tuberculosis, dysentery, diphtheria, etc., almost to the vanishing point. \* \* \* Tax money spent for local public health service will yield a bigger dividend than if invested any other way. The Highest Tax We Pay is for preventable disease. Money invested for health work will yield a dividend in dollars and cents for the people amounting to from 300% to 3,000%. \* \* \* The program for Florida as presented by Dr. Hanson has a perfectly sensible series of objectives. \* \* \* We need some one on the job in each county with sufficient training to carry out the program in an effective economic manner. In the southern states, Alabama was the first state to have public health service, Walker County, with a population of about 60,000, largely rural, being the first to adopt it. \* \* \* The death rate for the average year for five or six years before the health department was founded was 19 per thousand population. Two or three years after the health service was begun, the death rate had come down to 12 per thousand and preventable disease had been reduced one-half. Sanitation had been the

## ADMINISTRATION

main feature of the program brought about by intensive education. This reduction amounts to at least 6 deaths per thousand each year—this means 360 deaths less a year in that county. For every death prevented, at least 10 cases of illness were prevented. Every case cost at least \$10.00—a return of \$360,000 on an investment of about \$9,000 a year for the county health service. \* \* \* In the average county in Florida, results more or less comparable can be obtained by local health service. This is one of the greatest propositions which has ever been presented to the people of your state. The organizations represented here should get behind this program and put it over. \* \* \* The United States Government is interested. People go from Florida to Maine, California and other states. Nothing is local any more. The line of demarcation between people of the city and rural community has become indistinct. \* \* \* Health conditions in Florida are of tremendous importance to everyone in the United States because of the abundance of commodities shipped from your state. \* \* \* The usual statement when we go before County Commissioners is that 'we are hard up—we have had several bad years—taxes are too high—we cannot afford to do this.' The poorer the county the more disease the people will have and the more they need health service. It is a vicious circle. \* \* \* The United States Public Health Service is as interested in cooperating in the development of your county public health units as it is in any other state in the country. In Florida, you have an opportunity for a record-breaking achievement. Whether you do this or not in Florida means thousands of persons alive or dead in five or ten years from now."

Dr. J. J. Tigert presented the following resolution which was unanimously adopted by the group assembled:

Be it resolved by the representatives of the various statewide organizations attending the health conference here assembled that we endorse in principle the program of the State Board of Health to give the citizenship of Florida a full time health service in every community within the State.

Be it further resolved that we pledge the active cooperation of the organizations which we represent to the end that the citizens of our State may be intelligently enlightened as to the importance and necessity of a full time health unit in every county in Florida.

Be it further resolved that we appreciate the action of His Excellency, The Governor, in calling this important meeting which is so vital to the future welfare of the entire state.

Be it further resolved that we express our appreciation to the State Board of Health and pledge our individual and collective cooperation and assistance in its entire program for the protection of the lives, health and economic resources of our citizens.

## POST-GRADUATE OBSTETRICAL COURSE

This month the State Board of Health, in cooperation with the Children's Bureau of the Department of Labor, initiates the Post-Graduate Courses in obstetrics. The first class is sponsored by the Lee County Medical Society at Ft. Myers. Dr. J. R. McCord, Professor of Obstetrics at Emory University, eminent national authority is personally conducting the instructions, consisting of lectures, lantern slides and movie film demonstrations, from June 30th to July 4th.

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

Lucile Spire Blachly, M. D., Director

### MATERNAL MORTALITY SURVEYS

A study of the deaths of mothers from childbirth, or causes associated with childbirth, for 1928 as tabulated by the Children's Bureau shows Florida in an unenviable position. With a mortality rate of 90.6 deaths for every 10,000 live births, she tops the list for white mothers; with a rate of 110.2, she also tops the list for rural mothers. Considering colored mothers alone, with a rate of 124.7, she ranks ninth from the bottom being exceeded by Oklahoma, Louisiana, Tennessee, Arkansas, Georgia, South Carolina, Alabama, and Kentucky with Oklahoma, with a rate of 193.8, topping the list. (The colored rate is shown only in the 22 states reporting 2000 or more live births.) Considering urban deaths alone, twenty states report a higher rate. The maternal mortality rate for the birth registration area was 69.2; that for the urban, 77.6; the rural, 62; the white 62.7; and the colored 121.

The causes of these deaths for 1928 as tabulated by the Florida Bureau of Vital Statistics are as follows:

Accidents of pregnancy .....	21
Puerperal hemorrhage .....	33
Accidents of labor .....	36
Puerperal septicemia .....	86
Puerperal phlegmasia albadolens .....	4
Puerperal convulsions .....	93
Following childbirth .....	7

— 280 —

A careful maternal mortality survey covering the facts surrounding each death would be required before a fair judgment could be made as to the number of deaths that might have been prevented. Such a survey should be made. Surveys of this kind have been made in a dozen or more states in the last two or three years. Final reports are available for only a few, among them Maryland. Maryland with a rate of 49.5 for 1927, 64.6 for 1928, and 54.6 for 1929, on the completion of such a survey, covering the deaths outside of Baltimore, 291 in all, concludes that 166 of these deaths could have been prevented. Half of the septicemias resulted from abortion, before the seventh month. Of the 176 that went beyond the seventh month only 8% had had good prenatal care (Children's Bureau Minimum Standards), 35% had had inadequate care and 57% none. The pelvic measurements had been taken in only 18 cases. The chief primary cause was the ignorance of the mothers and their families. Rarely was a doctor called until the patient was nearly dead. Preliminary reports from several of the other states indicate similar situations. Judging from the experience of these states, it is fair to assume that our public must be educated to appreciate, demand, and intelligently use the known scientific methods in maternal hygiene if life is not to be lost needlessly.

**BUREAU OF DIAGNOSTIC LABORATORIES****Paul Eaton, M. D., D. P. H., Director****EXAMINATION OF MILK**

Butterfat, which is one of the valuable constituents of milk, is present in the form of very small droplets, each of which is surrounded by a coating of some sort, that prevents it from coalescing with its neighbors. Everybody knows that "oil and water will not mix", i. e., that fats are not soluble in water. But everybody knows that fats may be made into more or less stable mixtures with water and watery fluids, by appropriate treatment after the addition of some substance which will protect the small globules into which the oil is broken. The housewife makes use of this principle in making oil dressings, etc.

Butterfat, being lighter than the water which makes up the greater part of milk, tends to rise on standing undisturbed, forming cream. The souring of milk or cream tends to destroy the protective coating on the fat globules, thus making it easier to make butter by churning. There is, however, always some butterfat left in "buttermilk" because it is impossible to cause all the little globules of fat to stick together.

In examining milk to find out how much "butterfat" it contains, it is necessary to cause all of the fat globules to run together so that they may be taken into account. It has been found that strong hot sulphuric acid will destroy the protective coating on the fat globules so that they will run together. Therefore, in testing for butterfat, a measured amount of milk is put in a small bottle and the proper amount of sulphuric acid is added to it. The bottle is then shaken up and heated in a vessel of hot water. The butterfat drops then run together and being lighter than the mixture of water and acid, rise to the top of the bottle, where the total quantity may be measured.

The practical application of this principle was made by Prof. Babcock of the Agricultural College of Wisconsin. Its use has saved millions of dollars to dairymen by enabling them to cull out from their herds the cows that were not producing enough butterfat to pay for their feed.

When you read in the report of a milk analysis that the butterfat was 3.5% or 4.2% or whatever it may be, you may know that in all probability the test was done by the Babcock method, which was worked out by an obscure Professor, by "puttering around in a laboratory."

Since the foregoing was written, the following notice appeared in the public press:

**BUREAU OF DIAGNOSTIC LABORATORIES**

"The Capper prize of \$5,000 and a gold medal for the most distinguished service to American agriculture was today awarded to Stephen Moulton Babcock, professor of agricultural chemistry at the University of Wisconsin, for his invention of the Babcock test for butterfat in milk."

**SUMMARY OF WORK DONE IN THE LABORATORIES OF  
THE STATE BOARD OF HEALTH DURING THE MONTH  
OF MAY, 1930**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	1460	566	57	192	39	2314
Diphtheria .....	1910	118	12	166	11	2217
Typhoid .....	330	132	39	100	61	662
Malaria .....	638	158	50	30	167	1043
Rabies .....	24	3		3		30
Tuberculosis .....	207	91	12	85	38	433
Gonorrhea .....	447	186	30	126	20	809
Kahn .....	3448	1134		709		5291
Water: Count .....		51		134	1	186
Water: Colon .....				134		134
Milk: Bacterial Exam.	74	196	116	316	20	722
Milk: Chemical Exam.	146	285	117	139	20	707
Miscellaneous .....	134	114	15	441	20	724
	8818	3034	448	2575	397	15272
Specimen Containers Distributed .....						7909

**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin .....	10,000 units	36 Packages
	5,000 units	16 Packages
Toxin Antitoxin .....		2466 C. C.
Schick .....		1150 Tests
Tetanus Antitoxin .....	20,000 units	9 Packages
	10,000 units	8 Packages
	1,500 units	834 Packages
Anaerobic Virus .....	10 c. c.	2 Packages
Typhoid Vaccine .....		2676 Treatments
Vaccine Virus .....		2970 Capillaries
Antirabic Virus .....		13 Treatments
Antimeningococcus Serum .....		1 Cylinder
Carbon Tetrachloride .....		2825 Capsules

ALL REQUESTS FOR BIOLOGICS SHOULD BE DIRECTED TO  
THE STATE LABORATORY, STATE BOARD OF HEALTH,  
JACKSONVILLE, FLORIDA

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****MEASLES**

The organism or infectious agent which produces measles has never been identified but the virus or infection of the disease is known to be present in the secretions from the nose, mouth and throat of an infected individual for a minimum period of 9 days including the stage characterized by catarrhal symptoms and lasting about 4 days prior to the appearance of the rash and from then on during the first 5 days of the eruption. After this, the disease is rarely transmitted from a patient to a susceptible individual.

Of all communicable diseases, measles is the most readily transmitted. Practically all susceptible individuals exposed will contract measles. The infection is transmitted directly from person to person or indirectly by articles recently soiled with the secretions from the nose and mouth of an infected individual. Carriers such as we know for typhoid, diphtheria and scarlet fever are unknown for measles and the infection is probably never carried from house to house by the clothing of physicians, nurses or other visitors. It usually takes about 10 days for the earliest symptoms to develop after an individual has been exposed.

In order to effectively control measles, five precautionary measures are necessary.

1. Recognition of the disease by the clinical symptoms. Special attention should be given to a rise of temperature in a susceptible individual who has been exposed and such an individual should be examined by a physician who will look particularly for an early eruption in the mouth, particularly on the palate. The spots which appear here are known as Koplik spots and they appear before the skin eruption develops.

2. Isolation. Every case or suspected case of measles should be isolated from susceptible individuals during the period of communicability referred to above.

3. Immunization. The use of serum or whole blood from convalescent measles patients or from healthy adults who have had measles will prevent or modify the symptoms in an individual who has been exposed. If given within five days after the exposure, these may be averted in a high percentage of instances, and if not averted, the disease is modified. If given later but before the onset of symptoms, the blood or serum of the measles convalescent will modify the severity of the attack and the patient acquires permanent immunity.

**BUREAU OF COMMUNICABLE DISEASES**

4. Quarantine. All susceptible children and teachers who have been exposed to measles should be excluded from school and public gatherings until 14 days after the last exposure.

5. Disinfection. During the period of communicability all articles soiled with the secretions from the nose and throat of the patient should be disinfected by boiling, burning or chemical disinfection and at the end of the period the room should be thoroughly cleansed with soap and water. All the personal linen and bedding should be laundered and the mattress exposed to direct sunshine.

During an epidemic of measles, there should be daily inspection of children in the public school, particularly those who have not had measles. If possible, this inspection should include taking and recording of temperature and any child with a temperature above 99 degrees should be excluded pending a diagnosis. Schools should not be closed or classes discontinued particularly if this daily inspection by a physician or nurse can be provided for.

Measles is particularly dangerous to small children hence the necessity of protecting babies from exposure.

Measles in itself is rarely fatal but pneumonia, which is a common complication, is frequently the cause of death. It is, therefore, necessary to put all patients with this disease in bed. The room should be adequately ventilated but the patient should be protected from sudden changes of temperature and a doctor should always be in attendance.

**ONE WAY OF DOING IT**

A young woman with her three children, while visiting her sick mother-in-law, noted on her a peculiar eruption and asked with considerable alarm about the nature of the disease. On being told it was smallpox, she departed in haste and went straight to the health officer with her offspring to have them vaccinated. At the same time she indignantly related the story of her visit. On investigation, the diagnosis was confirmed, the house placarded and vaccination offered to all the household. The sick lady decided against vaccination for her husband on the ground that it might interfere with his work, so all the rest were vaccinated. Then the husband was asked: "Are you going to be vaccinated or don't you have the say-so?" This was too much for the old gentleman whose weakness, up to this point, had been rather too evident. He was obliged to proclaim the mastery of his own destiny, and to prove his authority, he offered his left arm with the sleeve rolled high.

**BUREAU OF ENGINEERING**  
**Ellsworth L. Filby, C. E., Chief Engineer**

**WATER PURIFICATION PLANTS IN FLORIDA**

In looking over the water supplies that are treated in some way or another in Florida, we find that there is a general trend to the utilization of the protective treatments such as filtration or chlorination and also towards the removal of mineral ingredients of the water which tend to make it hard (soap consuming) or stained (iron color). Florida has apparently an abundant supply of ground water in the limestone rock underlying the state but it is often very hard or colored. Moreover, in limestone country, the waters are often contaminated by surface water or sewage entering the underground waters some distance away. Recurrent bacterial evidence of contamination is indicative of pollution that may be occasionally entering the supply from distant points. A river may rise and through subterranean passages influence water in deep wells. This has been proved at High Springs and the influence of drainage wells is apparent at Live Oak. Both of these places have treated their waters until opportunity presented itself to get new supplies apparently not influenced.

Chlorination has been widely used in Florida and will apparently be more extensively used. Herman Gunter, State Geologist, at Tallahassee in a recent paper before the Florida Section, American Water Works Association, at Gainesville stated: "With waters from our deep formations, the danger of contamination is present even though we all agree that, on the whole, such waters are less liable to contamination (than shallow wells). It is, however, this general feeling of security that the quality of our deeper waters is above suspicion that may lead us into difficulties and regrets if care in their development is not exercised. Illustrations of surface water gaining direct entrance to underground supplies are too numerous to require special mention as disappearing streams are common to all sections of the state where sinks are found. Wells drilled for sewage disposal are of variable depth and in this respect are comparable to water wells of the same locality." So it is that we have chlorination plants on well waters at Cedar Key, Cocoa, Coral Gables, Hollywood, Jacksonville, Lakeland, Lake Worth, Live Oak, Miami, Mt. Dora, New Smyrna, Ocala, St. Augustine, St. Petersburg, South Jacksonville, Sanford, Tallahassee and the U. S. Naval Reservation at Pensacola.

Chlorination is employed by the above cities as an insurance and a safeguard against chance or occasional contamination. These cities are alert to the danger of water borne disease.

Many cities use surface waters and treat them either for bacterial removal or color removal. Notable in this list are the filtration plants at Clewiston, Ft. Pierce, Okeechobee, Orlando, Tampa, Tarpon Springs and West Palm Beach.

Softening plants to remove the hardness and possible color or iron are maintained at Boca Raton, Cocoa, Daytona Beach, Ft. Lauderdale, Miami, Ormond and Tampa.

**BUREAU OF ENGINEERING**

Plants for the removal of iron alone are at Stuart and Punta Gorda, although the Cocoa filtration softening plant involves iron removal also.

A list of the cities and types of treatment employed are listed below:

CITY	PLANT OWNERSHIP	SOURCE OF WATER	AVERAGE PUMPPAGE Gallons Per Day	PLANT PROCESS EMPLOYED
Apopka	Private	Lake	150,000	Chlorination
Boca Grande	Private	Creek	18,000	Chlorination
Boca Raton	Public	Shallow Wells	300,000	Coagulation—Softening Sedimentation—Filtration Re-Carbonization
Canal Point	Private	Lake	60,000	Coagulation—Softening Sedimentation—Filtration Chlorination
Cedar Key	Public	Shallow Wells	25,000	Chlorination
Clewiston	Private	Canal	150,000	Coagulation—Softening Sedimentation—Filtration Chlorination
Cocoa	Public	Shallow Wells	175,000	Iron Removal—Coagulation Sedimentation—Softening Filtration—Chlorination
Coral Gables	Public	Shallow Wells	850,000	Chlorination
Dania	Private	Canal	100,000	Softening—Coagulation Sedimentation—Filtration Chlorination
Daytona Beach	Public	Mainland Wells	1,000,000	Coagulation—Softening Sedimentation
Daytona Beach	Public	Peninsular Well	900,000	Softening—Coagulation Sedimentation—Filtration
Ft. Lauderdale	Public	Shallow Wells	800,000	Iron Removal—Softening Coagulation—Sedimentation Re-Carbonization—Filtration Chlorination
Ft. Pierce	Public	Canal	400,000	Iron Removal—Coagulation Sedimentation—Filtration Chlorination
Fulford	Private	Shallow Wells	80,000	Softening—Sedimentation
Gulf Hammock	Private	Creek	150,000	Chlorination—Softening Coagulation—Filtration
Hollywood	Public	Deep Wells	500,000	Chlorination
Homestead	Public	Shallow Wells	225,000	Softening—Sedimentation Filtration
Homosassa	Private	Spring	5,000	Chlorination
Indiantown	Private	Canal	6,700	Coagulation—Sedimentation Filtration—Chlorination
Jacksonville	Public	Deep Wells	12,000,000	Chlorination
Lakeland	Public	Deep Wells	1,300,000	Chlorination
Lake Worth	Public	Shallow Wells	750,000	Chlorination

## BUREAU OF ENGINEERING

CITY	PLANT OWNERSHIP	SOURCE OF WATER	AVERAGE PUMPAGE Gallons Per Day	PLANT PROCESS EMPLOYED
Live Oak	Public	Deep Wells	175,000	Chlorination
Miami	Public	Hialeah Wells	15,000,000	Softening—Coagulation Sedimentation—Filtration Re-Carbonization—Chlorination
Miami	Public	Coconut Grove Wells	350,000	Softening—Sedimentation
Miami Shores	Public	Shallow Wells	36,000	Coagulation—Filtration Softening
Mount Dora	Public	Deep Wells	150,000	Chlorination
Moore Haven	Public	Canal	100,000	Coagulation—Sedimentation Filtration—Chlorination
New Smyrna	Public	Deep Wells	300,000	Chlorination
Ocala	Public	Deep Wells	600,000	Chlorination
Okeechobee	Public	Lake	100,000	Coagulation—Sedimentation Filtration—Chlorination
Orlando	Public	Lake	2,500,000	Coagulation—Filtration Chlorination
Ormond	Public	Deep Wells	500,000	Softening—Sedimentation
Palatka	Public	Spring	750,000	Chlorination
Punta Gorda	Public	Deep Wells	230,000	Iron Removal—Filtration
Pine Castle	Private	Lake	4,000	Chlorination
St. Augustine	Public	Deep Wells	1,000,000	Chlorination
St. Petersburg	Public	Present Deep Wells	4,500,000	Chlorination
St. Petersburg	Private	New Deep Wells	5,000,000	Chlorination
Sanford	Public	Deep Wells	750,000	Chlorination
Shawano Plantation	Private	Deep Wells		Coagulation—Softening Sedimentation—Filtration Chlorination
South Jacksonville	Public	Canal	15,000	
Stuart	Private	Deep Wells	500,000	Iron Removal—Filtration
Tallahassee	Public	Shallow Wells	70,000	
Tampa	Public	Deep Wells	800,000	Chlorination
Tarpon Springs	Public	River	9,500,000	Coagulation—Softening Sedimentation—Filtration Re-Carbonization—Chlorination
U. S. Naval Reservation (Pensacola)	U. S.	Lake	350,000	Coagulation—Softening Sedimentation—Filtration Chlorination
Vero Beach	Public	Wells	465,000	Chlorination
West Palm Beach	Public	Deep Wells	350,000	Coagulation—Softening Sedimentation—Filtration
	Private	Lake	4,500,000	Coagulation—Sedimentation Filtration—Chlorination

**BUREAU OF VITAL STATISTICS****Stewart G. Thompson, D. P. H., Director****A HEALTHIER FLORIDA**

The American Public Health Association, through its cartoon service, pictures very vividly "a healthier world." The cartoon on the back cover of this issue shows that the Health Department, linked with public interest in prevention, is the way to erase unnecessary sorrow and death from any city, county or state. Your Health Department knows how to clean house but cooperation and public interest are necessary to do a thorough job.

Great progress has been made toward decreasing the number of deaths from preventable diseases. For instance, in Florida last year there was not a single death from smallpox. Do you know the reason?

A total of 67 deaths was charged to diphtheria last year which is the lowest number from this preventable disease in the history of the state. In 1928, there were 69 deaths; in 1927, there were 93 deaths. This shows splendid progress. However, the fight is not won. Additional interest and cooperation will make possible the wiping out of deaths from this disease.

Typhoid fever took a death toll of 83 last year in Florida. In 1917, a total of 221 lives was lost to typhoid fever and in 1918, there were 255 deaths from the same cause. It is, indeed, very gratifying to find the number of deaths reduced to 83 for a single year but there is, as in the case of diphtheria, still a challenge for greater effort in the fight for control of this deadly disease.

The cartoon pictures scarlet fever. In Florida last year, there were four deaths from this disease. Rabies is also pictured and we find there were two deaths in Florida from rabies. This total of two deaths, both white, may not at first appear to be a great number. However, rabies is preventable, is unnecessary and any one who has stood at the bedside when a life was slowly being taken by this dread disease will never question the need for interest, cooperation and money in the Health Department.

In Florida, malaria stands out as a real problem. This is a preventable disease but still we find 470 persons died from this disease last year, 259 white and 211 colored.

Your State Health Officer and his associated Bureau heads, field workers, etc., are faithfully working for the reduction of preventable

## BUREAU OF VITAL STATISTICS

disease in this state. City and county health departments, together with the United States Public Health Service are also doing their part. The work can go on just so far as the limited funds appropriated for that purpose will permit. Florida is paying a high price in death tolls from preventable disease. We know how to clean house, BUT—(you know the answer.)

Standards for textbooks in health teaching are discussed in the July Hygeia by J. Mace Andress, editor of the school department. He suggests that the following questions be kept in mind by teachers as they study new texts: Is the book scientifically accurate? Does it tend to promote wholesome attitudes? Is it practical? Is it interesting? May it be studied without eyestrain? Is it teachable?

The following tables indicate the number of deaths from certain diseases by months, for 1930 as compared with the previous year. (Provisional figures.)

### TYPHOID DEATHS

Year	Jan.	Feb.	Mar.	Apr.	Total	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	10	5	3	3	21									
1929	2	4	6	11	23	8	11	13	7	4	6	5	6	83

### MALARIA DEATHS

Year	Jan.	Feb.	Mar.	Apr.	Total	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	17	15	13	16	61									
1929	24	7	15	14	60	30	40	65	59	72	71	40	33	470

### DIPHTHERIA DEATHS

Year	Jan.	Feb.	Mar.	Apr.	Total	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	5	6	3	2	16									
1929	8	6	3	3	20	3	1	1	8	10	6	6	12	67

### TUBERCULOSIS DEATHS

Year	Jan.	Feb.	Mar.	Apr.	Total	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1930	84	86	101	90	361									
1929	81	109	88	85	363	81	76	88	82	71	80	87	86	1014

## BUREAU OF VITAL STATISTICS

\*PROVISIONAL MORTALITY FOR MARCH, 1930, AS COMPARED WITH  
THE SAME MONTH OF 1929.

Int'l List No. (1930)	FLORIDA	DEATHS					
		March, 1930		March, 1929		Col- ored Total	Col- ored White
		Total	White	Total	White		
1-200	ALL CAUSES	1732	1089	643	1605	1007	598
1-2	Typhoid	4	—	4	6	3	3
6	Smallpox	—	—	—	—	—	—
7	Measles	6	5	1	1	—	1
8	Scarlet Fever	—	—	—	—	—	—
9	Whooping Cough	6	3	3	9	4	5
10	Diphtheria	4	3	1	3	3	—
11	Influenza	47	22	25	76	39	37
16	Acute Anterior poliomyelitis	2	1	1	—	—	—
17	Lethargic encephalitis	2	1	1	—	—	—
18	Meningococcus meningitis	1	1	—	—	—	—
23-32	Tuberculosis — all forms	100	51	49	88	42	46
38	Malaria	16	11	5	15	12	3
45-53	Cancer — all forms	104	84	20	75	63	12
62	Pellagra	21	7	14	24	12	12
59	Diabetes mellitus	21	16	5	24	18	6
78-89	Diseases of the nervous system	198	117	81	165	106	59
82	Cerebral hemorrhage, apoplexy	163	101	62	124	80	44
90-103	Diseases of the circulatory system	305	225	80	283	207	76
90-95	Diseases of the heart	269	195	74	262	190	72
104-114	Diseases of the respiratory system	139	84	55	97	58	33
107-109	Pneumonia — all forms	110	66	44	79	46	33
115-129	Diseases of the digestive system	122	57	65	113	69	44
119	Diarrhea and enteritis (under 2 years)	23	9	14	12	8	4
130-139	Nonvenereal diseases genitourinary system	197	143	54	159	97	62
130-132	Nephritis — all forms	167	131	36	140	89	51
140-150	The puerperal state	25	16	9	16	9	7

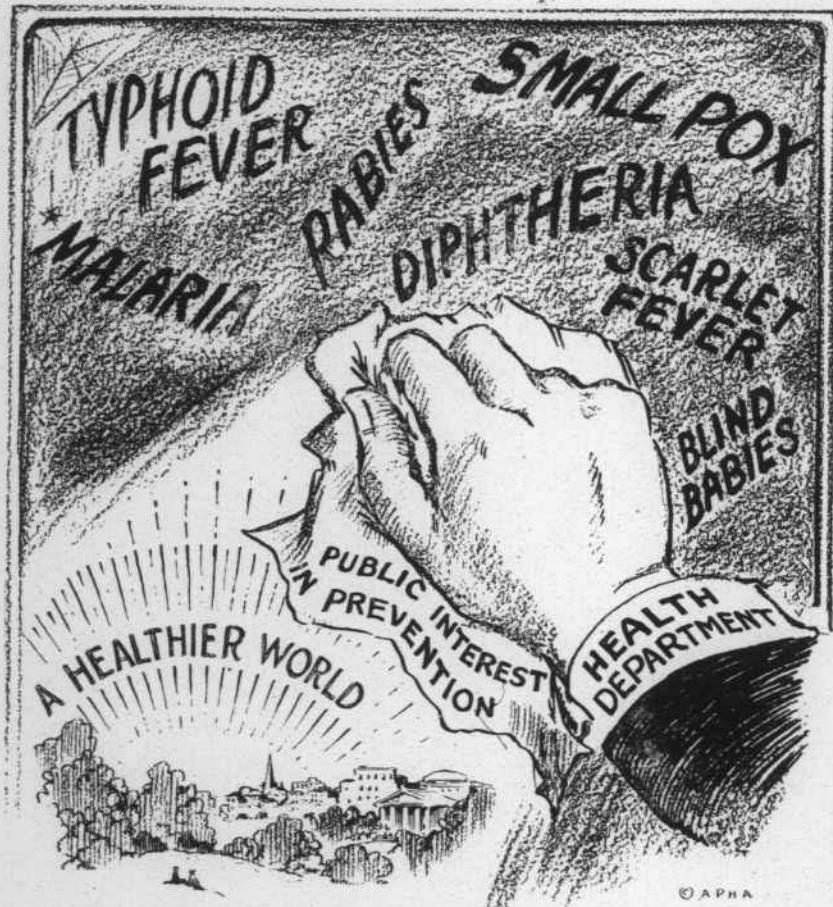
## INFANT MORTALITY

Number of LIVE BIRTHS	2320	1617	703
Number of STILLBIRTHS	117	60	57
Number of DEATHS under 1 year	145	74	71
By cause: (deaths under 1 year)			
Infectious diseases (1-44, exc. 11, 23, 32a)	9	4	5
Respiratory diseases (11, 23, 32a, 104-114)	26	7	19
Gastro-intestinal diseases (118, 119)	16	5	11
Malformations and early infancy (157-161)	71	49	22
Premature birth (159)	35	23	12
Injury at birth (160)	10	8	2

## ALL CAUSES, BY AGE

Ages	Deaths								
-1	145	1	27	2	19	3	10	4	7
0-4	201	5-9	19	10-14	27	15-19	42	20-24	72
30-34	81	35-39	84	40-44	100	45-49	121	50-54	136
60-64	111	65-69	121	70-74	155	75-79	115	80-84	88
90-94	11	95-99	2	100	1	Unk.	11	Total	1732

\*Includes delayed certificates.



WE KNOW HOW TO CLEAN HOUSE, BUT-  
PUBLIC COOPERATION IS NECESSARY TO DO A THOROUGH JOB



# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

AUGUST, 1930

No. 8

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

BACTERIA IN MILK—*Eaton*

MATERNITY LETTERS—*Blachly*

TUBERCULOSIS CLINICS—*Brink*

TEN LEADING KILLERS—*Thompson*

HOW NECESSARY IS ILLNESS?—*Hanson*

SEWERAGE AND SEWAGE DISPOSAL—*Filby*

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## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### "HOW NECESSARY IS ILLNESS?"

The quotation above appeared recently as the title of an editorial in one of the State's leading papers. The general trend of the article quite correctly pointed out that a considerable portion of illness was unnecessary. A comparison was made with methods employed in Vienna and Russia, and then a quotation followed from the Christian Science Monitor, an organ which is not in harmony with the practices of modern Health Departments. The comparison made between providing dinners and vacations for school children, with "compulsory inoculation and vaccination" does not convey a true impression of the modern public health program. Much can be accomplished by "ordinary rules of right living" and many cases of illness would be avoided if all people would observe perfect rules of cleanliness. The writer referred to does not know that he and all who escape the ordinary infectious diseases do so because of a gradual process of immunization in that from time to time they have consumed enough of the causative agents, through error (in technique—not in belief) to in a way inoculate themselves unknowingly against the diseases they have escaped. They have been immunized in a natural way. Those who are suddenly exposed to communicable disease against which they have no acquired immunity are usually prompt victims of the disease.

No one knows better than the health officer who has spent years under various conditions and in various countries that much illness is unnecessary. The teachings of the "Cleanliness Institute," the liberal use of soap and water, is excellent as an aid in combatting disease. It alone, however, does not fill the entire bill. It will not protect you against the insect borne diseases, nor will it insure you against contracting smallpox if you knowingly or unknowingly come in contact with such a case.

Insofar as Florida is concerned, the greatest decrease in incidence has occurred in those diseases for which there are protective inoculations. The diphtheria rate has dropped in this state from 8.7 in 1926 to 4 per 100,000 of population in 1929, since the advent of toxin antitoxin, the Schick test and the more prompt use of antitoxin. The typhoid rate for last year was less than 6 per 100,000 of population, and smallpox has become a negligible factor. Here we can repeat: "It is only those who want these diseases who have them," meaning by this that they prefer to take a chance rather than to avail themselves of certain protection which has been developed by painstaking medical research.

Florida's greatest problem today is presented by the group of illnesses for which we do not have protective inoculations, or vaccinations, outstanding among which we can cite tuberculosis, malaria and hookworm diseases. For malaria alone, we have a rate of over

## ADMINISTRATION

31 deaths per 100,000 population and a morbidity of 600 per 100,000. When the Utopian era arrives and communicable diseases have been banished, we can adopt the slogan of "No Inoculations" but while things are as they are today, we must use the intelligence which guides us in a beneficial selection of means available for safeguarding the physical well-being of the people, accepting our just responsibility rather than "passing the buck" to a very busy and widely occupied Almighty God.

### THE SURGEON GENERAL'S AND THE STATE AND PROVINCIAL HEALTH OFFICERS' CONFERENCE

The State Health Officer attended the meeting of the Surgeon General's and the State and Provincial Health Officers' Conference in Washington, June 18th to 20th, at which 40 states, Mexico, Porto Rico, Hawaii and Canada were represented by their respective Health Officers and other accredited employees.

The U. S. Public Health Service had the leading part in the program presenting sound, well worked up papers for which the Service is generally and creditably recognized. The Surgeon General and his staff have established standards and a leadership in public health activities in this country which deserve the grateful commendation of the Nation.

Among the several papers presented by the Service, there were those on the present status of the efficacy of the antimeningococcus serum pointing out the need for more extensive research for the cure and control of cerebro spinal meningitis, a highly fatal disease.

Undulant fever was ably discussed and the data brought out indicated that where there was not sufficient control of dairy herds, milk should be pasteurized before being offered for sale.

Space does not permit going into details of the other interesting papers presented and it is, therefore, recommended that those who have access to the proceedings of the Conference read them carefully as much helpful information will be found therein.

### POSTGRADUATE OBSTETRICS COURSE

Dr. McCord's postgraduate obstetrical courses, made available by the Children's Bureau of the Department of Labor and given under the auspices of the State Board of Health, have met with a very gratifying success. The courses so far have been given at Ft. Myers, Sarasota and Tampa. The physicians who have attended these courses are highly complimentary and feel that they have derived a benefit such as they have rarely obtained from any other postgraduate course which they have attended. It is hoped that the physicians will take advantage of the opportunity which is presented to them in other sections of the state.

Beginning on the 28th of July, the second series is given on the East Coast; from the 28th to the 1st of August at Ft. Pierce; from the

## ADMINISTRATION

4th of August to the 8th of August, at Miami; and from the 11th to the 15th at West Palm Beach. Beginning the week of the 25th of August to the 29th, Dr. McCord will give a course at Lakeland; from the 1st to the 5th of September he will be at Orlando.

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

Lucile Spire Blachly, M. D., Director

## MATERNITY LETTERS

This Bureau now has available two series of maternity letters for Florida mothers. One set was written especially for those who are or should be using physicians and the other for those who, by reason of their handicaps, educational or economic, must or at least now feel they must use midwives.

These letters, in principle, are no experiment. They have been tested and found valuable. Experience has proved their use consistently promotes the three principles enumerated by Dr. Ray Lyman Wilbur and accepted by the Committee on the Costs of Medical Care (at the end of the third of the five year study), to-wit:

1. They preserve the personal relationship between physician and patient.
2. They promote preventive medicine, both by the private practitioner and the public health authorities.
3. They encourage the community to supply the necessary facilities, both as regards physical equipment and personnel necessary to adequately prevent illness when preventable and to cure it when curable.

**WHO READS THE LETTERS?** Women and men in all walks of life. Naturally those college trained persons having a speaking acquaintance at least with psychology, sociology, biology, philosophy, get much from them—reading between the lines and following up the reading courses or class work suggested. These persons set the standards for their communities. Mothers and fathers, careful observers, without this formal schooling, find them helpful, answering directly or indirectly many of the numerous questions life has left unanswered. To the young couple just building the love nest they give that scientific guidance that, intelligently followed, leads safely past the numerous pitfalls their parents stumbled into. To the under-privileged, they give comfort, consolation, assurance, coupled with proved principles in maternity and infant hygiene which enable many a couple to find its way through the dark and devious by-paths to the light of a better understanding of the mysteries of life.

These letters will be sent upon request to any expectant mother desiring them. Doctors, nurses, teachers, social workers, church folk—anyone wishing to review the set or sets will be furnished copies on request.

**BUREAU OF DIAGNOSTIC LABORATORIES****Paul Eaton, M. D., D. P. H., Director****BACTERIA IN MILK**

Sir Joseph Lister, the great surgeon who made a practical application of the germ theory of disease in his "antiseptic" surgery, was very much interested in bacteriology. One problem that engaged his attention is of great interest to us. He thought that milk, which is a physiological secretion, ought to be sterile if properly produced, and when his tests, which were conducted with the greatest care, showed that milk was not sterile, he assumed that he had made some mistake in his work. That is to say, he allowed his pre-conceived notions to blind him to the facts. He later recognized his error.

We know now that in healthy cows there are many bacteria on the walls of the little milk tubes in the udder so that even when milk is produced under the most exacting conditions it contains bacteria. But these natural inhabitants of milk are not harmful. They are the bacteria that cause the normal "souring" of milk, and if milk does not "sour" in a reasonable time at ordinary temperatures we feel that something is wrong. Milk also gathers bacteria out of the air during the process of milking. Air always contains bacteria and the dusty air around a barn or milking shed is particularly rich with them.

A great part of the bacteria that are ordinarily found in milk produced under conditions of reasonable cleanliness are furnished by the utensils. Complete freedom of utensils from bacteria is practically impossible of attainment. There are bacteria all about us, and the only way in which milk pails can be sterilized is by baking them in an oven or by steaming them and in either case they begin to pick up bacteria as soon as they are exposed to the air. (Some bacteriologist washed off a dollar bill with sterile water and by experimenting with a few drops of the wash water, came to the conclusion that there had been 96,000,000 germs on the bill.) But fortunately for us, these germs which are so widely distributed in nature, are not able to cause disease.

The germs which do cause disease are introduced into milk by or from persons who have had or who have, the disease involved.

It is known that some diseases are most infectious, (that is, 'catching') in their very earliest stages. That is to say, a milker might be in the early stages of scarlet fever, for instance, "coming down" with the disease as we say, but not aware of it, and it would be perfectly possible for him to infect the milk he handled and so give the disease unwittingly to a large number of people.

The public is entitled to a milk supply produced in the cleanest possible fashion, but it is also entitled to the only possible protection against accidents such as I have described, which is pasteurization. It is true that pasteurization will not change dirty milk into clean milk but it is equally true that it offers protection against accidents that

**BUREAU OF DIAGNOSTIC LABORATORIES**

are absolutely beyond control in any other way.

Pasteurized milk will "sour" like normal milk because the heating and cooling to which it has been subjected is not enough to kill the normal inhabitants of milk while it IS enough to kill practically all of the germs which can cause disease.

**SUMMARY OF WORK DONE IN THE LABORATORIES OF THE  
STATE BOARD OF HEALTH DURING THE MONTH  
OF JUNE, 1930**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	891	345	46	315	37	1634
Diphtheria .....	267	74	7	65	3	416
Typhoid .....	320	144	51	52	57	624
Malaria .....	474	150	93	20	155	892
Rabies .....	23	1	1	2		27
Tuberculosis .....	189	77	10	44	15	335
Gonorrhea .....	392	159	28	99	31	709
Kahn .....	3456	926		491		4873
Water: Count .....		66		136	7	209
Water: Colon .....				136	4	140
Milk: Bacterial Exam. ....	90	174	118	336	20	738
Milk: Chemical Exam. ....	151	175	119	143	20	608
Miscellaneous .....	135	40	25	303	6	509
	6388	2331	498	2142	355	11714
Specimen Containers Distributed .....						5974

**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin.....	10,000 units	28 Packages
	5,000 units	8 Packages
Toxin Antitoxin.....		2130 C. C.
Schick.....		200 Tests
Tetanus Antitoxin.....	20,000 units	2 Packages
	10,000 units	3 Packages
	1,500 units	696 Packages
Anaerobic Virus.....	10 c. c.	6 Packages
Typhoid Vaccine.....		2174 Treatments
Vaccine Virus.....		907 Capillaries
Antirabic Virus.....		35 Treatments
Carbon Tetrachloride.....		1992 Capsules

**ALL REQUESTS FOR BIOLOGICS SHOULD BE DIRECTED TO  
THE STATE LABORATORY, STATE BOARD OF HEALTH  
JACKSONVILLE, FLORIDA.**

**BUREAU OF ENGINEERING****E. L. Filby, C. E., Chief Engineer****SEWERAGE AND SEWAGE DISPOSAL IN FLORIDA—1930**

In considering the status of sanitary sewerage and sewage disposal in Florida, it is very desirable that the party considering this phase of sanitation think well of the topographical and geological features of the state. Florida at first was settled along the old Spanish trail route from St. Augustine westward through Jacksonville, Lake City, Madison, Monticello, Tallahassee, Quincy, Marianna, De Funiak Springs, Milton and into Pensacola. The trail starts and stops on salt water and traverses the coastal plain and then the rolling sand and clay hills of southern Georgia and Alabama. Between the terminals we find good grades but very often only a limited amount of water for final dilution as most of the cities are set on hills. These towns are of the slow, steady growth character. They are very similar to any rural southern county seat towns—composed largely of retired farmers, trades people and the like. Having a steady growth, the towns are compact and thus easily served by sanitary sewers. Topography necessitates, oftentimes, many outfall lines usually terminating in small septic tank installations. Pumping is rarely utilized except at Lake City where a pump unit is utilized to lift the sewage from the north side of the city into the main system which terminates at a treatment plant south of town.

Lake City has a very modern and efficient treatment plant and for a city of 4,300 population is to be congratulated. The plant, constructed in 1929, consists of a Dorr clarifier, dosing tank, sprinkling filter, final settling and separate sludge digestion tank. Chlorination is used to prevent odor nuisance from the sprinkling filters. Final disposal is into a small branch and a highly stable effluent is produced. Tallahassee has for years been procrastinating on a sewage disposal problem and now faces an expenditure of several hundred thousand dollars for sewage treatment. Preliminary plans call for Imhoff tank treatment—sprinkling filters and final disposal by dilution into a small lake. Marianna uses limestone sinks along the banks of the Chipola River to dispose of raw sewage into the underground waters. It is planned to eliminate this pollution by extension of sewer outfalls to the Chipola River and the utilization of tank treatment for the prevention of floatage nuisance.

Pensacola and Milton, like St. Augustine and Jacksonville, utilize the presence of sea water and brackish waters in great volumes for the disposal of their wastes. Both Jacksonville and Pensacola need an extensive sewerage program as neither city has kept pace with sanitary sewers in comparison to population increases.

Florida is famous throughout all the country for its resorts dotted along the East Coast with its famous Indian River and inland water way

## BUREAU OF ENGINEERING

of lakes, rivers, canals and bays with numerous openings from the ocean. At first, developments took place on the mainland side and then on the ocean islands or keys where such cities as Palm Beach and Miami Beach arose, from the mangrove swamps. To protect bathing beaches and for ease and cheapness of construction, many outfalls are utilized into this inland water way and dilution is the main method of disposal. At Vero Beach, we have a separate sludge digestion plant of the coarse screen, Dorr clarifier, separate sludge digesting tank type; final disposal into a drainage canal. Palm Beach is planning a fine screening chlorination plant in the future and West Palm Beach will have to take some steps to eliminate the pollution of Lake Worth. During the boom, an extensive sanitary district plan was advocated for this area by George W. Fuller of New York but it has never materialized. Financial troubles place any work very much in the future except for the town of Palm Beach.

Boom towns, towns of very rapid growth and scattered development dot the East Coast. Good, sandy, well drained townsites to very low rock areas vary the problem. Pumping is usually necessary along the islands or keys such as at Miami Beach and Palm Beach. Extensive outfalls are used on the mainland. At Delray Beach, the clarifier unit of a separate sludge type plant was installed but has been abandoned. At Ft. Lauderdale, a complete modern up to date activated sludge treatment plant is constructed and under canvass. The plant designed and built by Solomon, Norcross and Keis in 1926 has never been used because the public has defeated every bond issue for sewerage extensions and sewage pumping stations. Hollywood depends on individual septic tanks with one line of sewerage taking the effluent from these tanks in the business area. A sandy soil with porous coral rock near the surface aids in the disposal of the liquid wastes. Miami disposes of her sewage mainly raw into the Miami River and Biscayne Bay. A small, fine screen plant handles a portion of the sewage. Experimental work has been done at Miami and the future will see a possible separate sludge type plant on an island in Biscayne Bay. Miami Beach pumps its raw sewage into the Government ship channel cut on outgoing tides and finds no evidence of its coming back on the bathing beach. At Miami Beach is found a very excellent example of architectural camouflage of a sewage pump station set in a public park. It was designed by Hazen and Whipple. Sewage pump stations are housed in garages and thus obviate any aesthetic complaints. Coral Gables, that extensive development and city south west of Miami, depends on individual septic tanks for all sewage disposal. The open porous rock on which the city is built allows vertical drainage of the waste liquids into the first water strata which is not used for water supply purposes. Miami, likewise, depends very largely on individual septic tanks. Homestead has a sanitary sewer system with a pumping unit. Final disposal is into one of the drainage canals.

(To be continued in September)

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****MALARIA**

This is the season when malaria begins to be prevalent. Now is the time to set up our defense against invaders that cause "chills and fever."

Quinine is the specific for curing and preventing malaria. Quinine is the active ingredient for all proprietary malaria remedies and quinine can best be purchased as quinine. It is usually put up in 5 grain capsules. A capsule a day keeps the fever away. It takes more to cure the disease and a sick man should go to the doctor for his treatment.

This is the season when a well screened (mosquito-proofed) home offers the best and cheapest kind of insurance against sickness, death and heavy expenses on account of malaria. The State Board of Health can tell you how.

**Screening Demonstrations**

Following is the list of places where the mosquito-proofing squad will give demonstrations. If you are interested in comfort, economy and health you should visit one of the homes where the work is going on.

**Schedule of Demonstrations**

Duval County .....	August 6th and 8th
Levy County .....	August 13th and 15th
Dixie County .....	August 20th and 22nd
Sumter County .....	August 27th and 29th
Hillsboro County .....	September 3rd and 5th

**CREEPING ERUPTION**

As a result of the studies of Dr. J. L. Kirby-Smith and his associates, the causative agent of creeping eruption has been discovered. This very distressing condition is due to the invasion of a microscopic hookworm, the embryo or baby form of a parasite commonly found in cats and dogs. The eggs of the parasites are passed with the stool of the host and hatch in damp soil. Prevention consists in avoiding contact with soil contaminated by the excrement of cats and dogs. Any damp spot, muddy place or pool may be a source of creeping eruption. Hookworm treatment for the cats and dogs is of definite value as a preventive measure.

For treatment one should go to the doctor.

**TOE ITCH**

There is a rather troublesome disease that attacks the skin of the feet more than other parts and shows particular preference for the areas between the toes. This disease is frequently called "toe itch." The germ or organism that causes it is similar to that of ringworm so it is sometimes called "trichophytosis." This has been confused with

## BUREAU OF COMMUNICABLE DISEASES

every kind of skin eruption about the feet but most often it is called "ground itch" and blamed on the hookworm which is justly accused of doing much other harm.

Toe itch can be prevented by scrupulous cleanliness of the feet, foot gear and bath, particularly public bathing places. For treatment one should go to the doctor who can, with the intelligent co-operation of the patient, cure the disease.

### TUBERCULOSIS CLINICS

The Field Medical Officer, in the lower *East Coast* district spent the entire month of May doing tuberculosis clinic work. The State Board of Health and the Florida Public Health Association cooperated in the conduct of clinics at Pensacola, Quincy, Ocala, Dade City, New Port Richey, Kissimmee, St. Cloud, Bradenton, Sarasota and Ft. Myers. About three days were spent at each clinic and a total of 1008 persons attended the clinics. Of these, 708 were given chest examinations and in 42 or 5.9% there was evidence of tuberculosis in various stages of advancement. Tuberculin tests were given to 606 individuals of whom 473 returned for inspection. Among the latter there were 54 or 11.4% who reacted to the test.

Dr. Claxton, who has given special attention to the diagnosis of tuberculosis, will conduct other clinics as opportunity presents itself.

The early recognition of tuberculosis affords the greatest hope of recovery. Persons who have lost weight, feel tired most of the time, persons with loss of appetite or who have a "cold" or cough persisting more than two weeks, should have a thorough and complete examination with special attention to the possibility of tuberculosis. X-ray examination should be included if necessary.

To a large extent, the development of tuberculosis can be prevented by right living. Under-nutrition, overwork, dissipation and bad ventilation are apt to cause a latent tuberculosis to become active.

### THE SEMINOLES

Our Field Medical Officer, after making careful inquiry, reports that the Indians, who were driven from the Everglades by high water, have not suffered from privation or exposure and health conditions are normal. One member of the tribe is reported to have tuberculosis but this was not the result of flood conditions.

A general health survey of the Seminoles is being planned for this fall.

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Dr. A. P. Harrison, until recently stationed at Tallahassee as District Medical Officer, is no longer with the State Board of Health. Dr. H. A. McClure of Chipley has been engaged to take his place and will begin work in the district about the middle of August.

## BUREAU OF VITAL STATISTICS

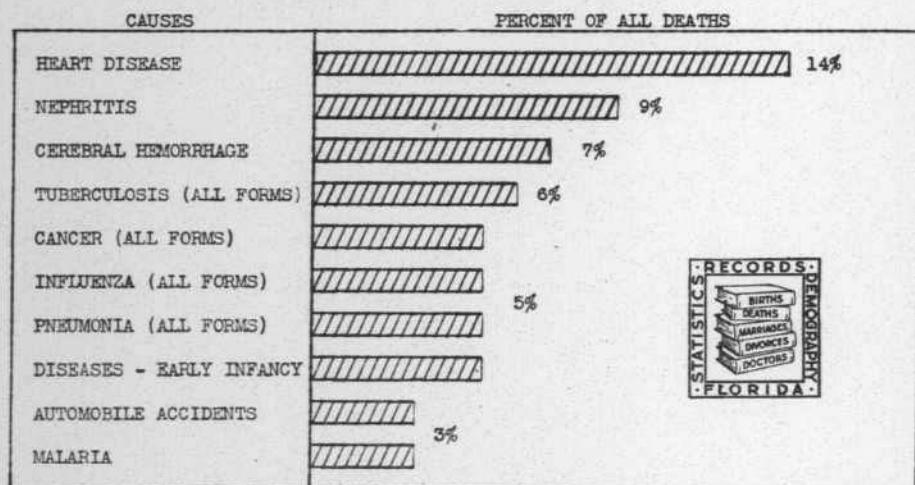
Stewart G. Thompson, D. P. H., Director

## TEN LEADING KILLERS



The chart below indicates the ten greatest killers in Florida last year together with the percentage each represents as compared with the total number of deaths reported. Space will not permit a discussion as to the reasons for these particular diseases ranking among the first ten as pages could be written on any one alone. Death rates are not shown in this issue owing to the fact that the 1930 census has not been officially announced for Florida.

Ten Leading Causes of Death, Florida — 1929



## HEART DISEASE

Heart disease still leads in the number of deaths caused in Florida. This disease has not only led for a number of years but the proportion of deaths attributed to this cause is steadily increasing as may be evidenced by the following table which indicates the number of deaths for the past five years, by color.

Year	Total	White	Colored
1929	2500	1725	775
1928	2481	1743	738
1927	2290	1590	700
1926	2351	1572	679
1925	2240	1589	651

**BUREAU OF VITAL STATISTICS****CHRONIC NEPHRITIS**

Next to heart disease, chronic nephritis takes the greatest toll of life in this state. It will be noticed, however, that 1,690 deaths were reported last year from this cause as compared with a total of 1,772 for the previous year. Although the disease is very deadly and ranks second, it is encouraging to note a decrease in the total number charged to it. Deaths in this state for the past five years are listed below, by color.

Year	Total	White	Colored
1929	1690	1027	663
1928	1772	1132	640
1927	1615	1016	599
1926	1548	1016	532
1925	1160	744	416

**CEREBRAL HEMORRHAGE**

The cause of death ranking third in Florida is cerebral hemorrhage. Unlike the comparison for nephritis, there is an increase in the number of deaths charged to cerebral hemorrhage. Deaths in this state for the past five years are listed below, by color.

Year	Total	White	Colored
1929	1291	797	494
1928	1172	736	436
1927	1152	723	429
1926	1157	734	423
1925	1070	708	362

**TUBERCULOSIS—(All Forms)**

This disease now ranks fourth in Florida. It is gratifying to find that fewer deaths occurred in 1929 from this cause than for the previous year. In fact, the total of 1,014 is the lowest charged to this disease since 1925 as will be noted from the table below where the totals by years and color are indicated.

Year	Total	White	Colored
1929	1014	416	598
1928	1102	481	621
1927	1097	463	634
1926	1187	519	668
1925	999	426	573

**BUREAU OF VITAL STATISTICS****CANCER—(All Forms)**

There is much to be done in the control of cancer. It ranks fifth among the most deadly diseases. Last year, a total of 994 deaths was charged to this disease, which represents the largest number during the past five years. The following table indicates the deaths from this disease for the past five years, by color.

Year	Total	White	Colored
1929	994	805	189
1928	887	705	182
1927	949	757	192
1926	878	723	155
1925	776	624	152

**INFLUENZA—(All Forms)**

The number of deaths charged to influenza fluctuates from year to year. However, a decided increase in the number of deaths charged to this disease is indicated in the results just obtained for last year. The number of deaths for the past five years is indicated below, by color.

Year	Total	White	Colored
1929	903	498	405
1928	666	378	288
1927	323	170	153
1926	668	370	298
1925	338	192	146

**PNEUMONIA—(All Forms)**

There is a reduction in the number of deaths charged to this disease last year as compared with the preceding year. The total number of deaths from this cause is tabulated below for the past five years, by color.

Year	Total	White	Colored
1929	864	504	360
1928	1085	647	438
1927	907	524	383
1926	1202	656	546
1925	971	523	448

**BUREAU OF VITAL STATISTICS****DISEASES OF EARLY INFANCY**

This group ranks eighth in Florida for 1929. It is also interesting to note that the total deaths from this group last year was lower than for any year during the past five. While this decrease holds good for the white population, it is not so for the colored since there were twelve more deaths from this group charged to colored population than for the previous year. The following table indicates the number of deaths from this group for the past five years, by color.

Year	Total	White	Colored
1929	823	501	322
1928	853	543	310
1927	955	624	331
1926	1049	671	378
1925	885	563	322

**AUTOMOBILE ACCIDENTS**

This cause ranks ninth in Florida and there is so much to give in the way of comment on this particular cause that it would possibly be wise not to make an attempt at discussion at all. At a later date, considerable space will be devoted to automobile accidents in this publication and comment will, therefore, be reserved for that time. Deaths from this cause for the past five years are listed below, by color.

Year	Total	White	Colored
1929	496	392	104
1928	397	295	102
1927	427	323	104
1926	512	396	116
1925	454	346	108

**MALARIA**

This cause ranks tenth among the greatest killers in Florida and since it is more or less restricted to specific areas, it is of more consequence than some other causes. The tabulation below plainly indicates the trend in this preventable disease and accounts for its inclusion in the program of the state health officer.

Year	Total	White	Colored
1929	470	259	211
1928	388	224	164
1927	208	92	116
1926	223	98	125
1925	209	112	97

EVERY DAY OF THE YEAR IN FLORIDA



**M**ore often than not a life preserver has the shape of a fishing rod, a golf club or a saddle.

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This Issue Exceeds 12,000 Copies



# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

SEPTEMBER, 1930

No. 9

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

TUBERCULOSIS—*Brink*

BACTERIA IN MILK—*Eaton*

ECONOMY IN HEALTH—*Hanson*

PROGRAM OF ACTIVITIES—*Blachly*

MOTOR VEHICLE ACCIDENTS—*Thompson*

SEWERAGE AND SEWAGE DISPOSAL—*Filby*

SEE YOUR DOCTOR FOR SPARE PARTS—*Cartoon*

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HENRY HANSON, M. D., STATE HEALTH OFFICER

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Arcadia.....	Jule Graves, R. N.
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Eden, R. F. D. Jensen.....	Sarah Ida Richards, R. N.
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Starke.....	Mary G. Dodd, R. N.

**COUNTY HEALTH UNITS**

Jacksonville.....	E. C. Stoy (U. S. P. H. S.)
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## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### ECONOMY AND HEALTH

I have attended two meetings of the Florida League of Municipalities and on each occasion endeavored to learn of what had transpired during the years of my absence from Florida.

At the meetings, one hears papers on a variety of topics having to do with municipal administration. Delegates read and listen to papers in a calm and dignified manner until some intrepid crusader speaks on bonded indebtedness, tax relief or the lack of uniform assessment of property throughout the State. In this he shows, while he is enthusiastically reading, that some are over-taxed, while others are assessed on a basis of 1/10 of what the case should be. He and others who follow his lead show that those who adopted the assessment and taxation system went Heinz ten better. Florida has sixty-seven standards of assessment and taxation. As for collection, the Heinz system appears to be a little more closely followed in that certain taxes can go through a pickling or preserving process and when taken up after a few years the shrinkage has molded them to a size more convenient to handle. His reasoning is plausible and gives him a feeling of peaceful content until he looks up and meets glances which say "thumbs down," and then the sensations along his spinal column are not so warm and he loses confidence as the pandemonium of argument breaks loose, pro and con.

Amidst and at the end of the tumult, there appears an illustration of what some consider those who "enter where Angels fear to tread," who tell the group of hoary-headed, municipal administrators that they have all been cut in the rain, and that the solution is something besides rain water and not the one so eloquently presented, and vigorously discussed; viz, that they all have hookworms.

"Economy" has become a slogan and it is time that it should be so. It is, however, as difficult to economize wisely as it is to spend wisely and one must be careful not to let false economy lead to injurious retrenchments.

A state or municipal health department is an insurance policy as essential as insurance is to any project or individual needing protection. A policy taken at an early age carries a lower premium if continued than the same policy would were it dropped and a renewal attempted at a later date when the premium would be higher due to the intervening unprotected time. If trouble comes in the form of sickness or death while the policy is ineffective all the previous investment is lost.

The Metropolitan Life Insurance Company's health campaign over a period of seventeen years cost the company \$20,000,000.00. The benefits derived from the investment according to Dr. Dublin,

## ADMINISTRATION

in savings to the company represented by less sickness and fewer deaths among the policy holders, were \$43,000,000.00 or a net saving of \$23,000,000.00. This viewed from a purely economic basis is a saving of over 100%. Investments of this type represent good economy. This company is putting more money into its health campaign every year and getting increasing returns.

In Florida, every citizen who pays taxes on \$1,000.00 pays 50c to the support of the state health department, the State Board of Health. In the larger cities, this is scarcely the price of one good "movie" picture. If each such citizen would invest 25c more for each thousand dollars of his assessed valuation it would give the State Board of Health sufficient funds to provide the necessary facilities to carry on effective health protection to the people of the State, especially in the rural communities where such diseases as malaria and hookworm are costing the state over \$1,000,000.00 each year, or more than three times the present total annual resources of the State Board of Health. Bear in mind that this loss is from only two preventable diseases. There are several other causes such as tuberculosis, maternal and infant mortality, pellagra, etc. What is the logical economic procedure?

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

**Lucile Spire Blachly, M. D., Director**

### PROGRAM OF ACTIVITIES

August 31 marked the close of the old program of the Bureau of Child Hygiene and Public Health Nursing and September 1 the beginning of the new. The principles underlying the new will be quite the opposite in some respects from the old. In the old program, much of the time of the state nurse was spent in inspecting children, white and colored, in the one and two teacher schools, in inspecting infants and pre-school children and in the instruction and examining of midwives.

In the new program, the state nurses will not inspect children, either white or colored, infant, pre-school or school. This departure, we realize, will be regretted by those who have come to look upon these inspections as an end in themselves—some maneuver that should be done annually as a matter of custom—but to the informed the change will be hailed with delight. By freeing the nurse from these time-consuming, all but worthless activities, she will be able to attack preventable disease at its source, i. e., the home. In the new program, the major part of her time will be spent in educating the parents in the prevention of disease and in the necessity for, and the methods of, getting physical defects and ill health corrected. Her subject-matter will pertain to the hygiene of maternity and infancy and

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

the pre-school child as well as the school child and, when indicated, his parents. Much attention will be given to nutrition and to health habits. The home care of the sick, particularly those suffering from tuberculosis and the communicable diseases, will receive attention with special stress on methods of prevention. Attention will be given to hookworm control and to mosquito-proofing the home.

The Director of the Bureau will divide her time between demonstrations, child health conferences for infants and pre-school children, the preparation and distribution of literature, maternity letters, etc., talks, and executive duties. The ideal toward which she is working is two-fold; (a) the adequate supervision and guidance of every infant and pre-school child by the family physician or pediatrician, and (b) the adequate supervision and guidance of every expectant, parturient, and nursing mother by the family physician or obstetrician. The Bureau will at all times seek to promote a close spirit of cooperation between patient and physician as being necessary to attain these ends. Babies come in single packages and, therefore, cannot be handled adequately on the mass production, mechanical basis. The private practice of medicine must be retained and improved.

The methods followed will vary as the population and the distribution of the population, facilities for the prevention and treatment of disease, and the nature of the public health problems vary but each county will be reached during the fiscal year. Briefly, the nurses will be districited as at present and each nurse visited by the director in rotation as rapidly as her time and the preliminary work of the nurse permits. A Child Hygiene Week will follow the social assets survey made by the nurse and the planning committee. The major activities during this week will be a demonstration child health conference, a health institute for community leaders, numerous exhibits, talks, lectures and demonstrations. The whole-hearted and active cooperation of all existing agencies, county-wide in scope, will be sought. Following the Child Hygiene Week, the nurse will remain in the county to give similar talks, exhibits and demonstrations to groups, classes, schools and individuals. The work done in any county by the Bureau of Child Hygiene and Public Health Nursing will be in the nature of a sample of what can be done in such a county if adequately staffed by a full-time county health unit.

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The Bureau of Child Hygiene and Public Health Nursing has two sets of letters for the expectant mothers of Florida, one set for those who intend using a midwife for the delivery, the other for those who intend using a physician. If the reader desires these letters for herself, some member of the family, some friend or neighbor, write to Bureau of Child Hygiene and Public Health Nursing, State Board of Health, Jacksonville, Fla.

**BUREAU OF DIAGNOSTIC LABORATORIES****Paul Eaton, M. D., D. P. H., Director****BACTERIA IN MILK**

Two dairymen were "talking shop" recently and one said: "This laboratory stuff is the bunk. I figure that they thought I didn't have a clean collar on last week when I milked so they gave me a count of 1,900,000. Nobody can count that many bacteria."

He was wrong about the collar, but he was right about counting 1,900,000 bacteria. Nobody would count so many even if he could.

The bacterial count of milk is very poorly understood by many people beside the dairyman above quoted. There are practically always bacteria in milk but different samples of milk differ so widely in this respect that it is necessary for the laboratory to have some standard way of expressing the bacterial content of the sample in question and this is the way it is done.

One cubic centimeter of the milk (about a quarter of a teaspoonful) is very carefully measured out and put into a bottle which has in it 99 c. c. of sterile water. This is then corked with a sterile stopper and shaken twenty-five times.

Out of this mixture of water and milk, one cubic centimeter is measured into another 99 c. c. of sterile water and thoroughly shaken. These bottles are labeled "1-100" and "1-10,000" because in the first bottle each c. c. contains 1-100 part of the original c. c. of milk and in the second bottle each c. c. contains 1-10,000 of the original c. c.

Then one c. c. from each bottle is added to a mixture of seaweed jelly and beef broth that will give each bacterium that is present a chance to grow, and poured into a sterile glass dish which is put into the incubator for 24 or 48 hours.

If there were 1,000 living bacteria in the original sample of one c. c., the chances are that one one-hundredth of them would be contained in the 1 c. c. sample taken out of the first bottle for cultivation. This will not be true every time, because chance distribution does not work that way, (as anybody who has ever played cards knows) but in the long run, it evens itself up and at any rate it is the best we can do.

If there were 100,000 living bacteria in the original sample of 1 c. c. the first plate would be likely to have 1,000 colonies which would make them entirely too numerous to grow. But the second plate would likely have about ten colonies.

In the case referred to at the beginning of this article there must have been 190 colonies on the second plate.

The best proof that the laboratory methods are reliable is the fact that the careful dairyman is able to produce milk which gives uni-

**BUREAU OF DIAGNOSTIC LABORATORIES**

form and consistent counts. If milk is thoroughly and quickly chilled after being drawn from the cow and is kept cool it will usually have a count below 25,000. Sometimes a good dairyman will have an accident that will give him a high count. Sometimes a poor dairyman will accidentally produce milk with a low count.

No one count ought to be taken as an index of the care and skill of a dairyman but these qualities will show very plainly in the long run.

**SUMMARY OF WORK—JULY, 1930**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	930	392	31	431	18	1802
Diphtheria .....	269	132	5	90	1	497
Typhoid .....	510	226	96	85	38	955
Malaria .....	845	246	95	15	77	1278
Rabies .....	16	2		4		22
Tuberculosis .....	202	85	17	51	6	361
Gonorrhea .....	445	198	40	99	15	797
Kahn .....	3911	1038		799		5748
Water: Count .....		46		136	1	183
Water: Colon .....				136	1	137
Milk: Bacterial Exam ..	96	274	94	338	23	825
Milk: Chemical Exam.	141	260	95	480	23	999
Miscellaneous .....	174	79	11	429	2	695
	7539	2978	484	3093	205	14299

SPECIMEN CONTAINERS DISTRIBUTED ..... 5752

**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin.....	10,000 units	17 Packages
	5,000 units	6 Packages
Toxin Antitoxin.....		1169 C. C.
Schick.....		400 Tests
Tetanus Antitoxin.....	20,000 units	10 Packages
	10,000 units	16 Packages
	1,500 units	1262 Packages
Typhoid Vaccine.....		2733 Treatments
Vaccine Virus.....		1329 Capillaries
Antirabic Virus.....		29 Treatments
Carbon Tetrachloride.....		2273 Capsules

ALL REQUESTS FOR BIOLOGICS SHOULD BE DIRECTED TO  
THE STATE LABORATORY, STATE BOARD OF HEALTH  
JACKSONVILLE, FLORIDA

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****FLORIDA AND TUBERCULOSIS\***

It would seem that the time has come to dispel certain illusions and correct some mistaken ideas regarding tuberculosis and the suitability of Florida climate for the improvement and arrest of this disease.

For years, there has been a belief that as soon as a person develops tuberculosis he must hasten to a different climate. This belief has been propagated to a great extent by those interested in tuberculosis centers in various parts of the country. Circulars and literature are sent by Chambers of Commerce and sanatorium owners extolling the virtues of their climate and altitude, the dryness of the air, the sunshine and other features, all over the United States. However, the opinion is fast becoming established that going away from home to take the "cure" for tuberculosis is an expensive and unnecessary step. This has resulted in many sanatoria in so-called tuberculosis centres having only one-fourth as many patients as a few years ago. Sanatoria in every state are arresting tuberculosis without sending patients away.

The death rate from tuberculosis in Florida in 1928 was only half of one per cent more than that of the whole United States, although a considerable portion of the population is negroes whose tuberculosis death rate is higher than that of the whites.

Let us attempt to evaluate our Florida climate and learn some of its advantages. First, let us consider "fresh air." There is no time of year when outdoor air cannot be tolerated twenty-four hours of the day. In northern climates, patients sleep on porches in zero weather and like it. Florida atmosphere besides being "fresh air" in the generally accepted sense is also "pure air." When we realize that in the north everyone who comes in contact with a tuberculosis patient is passing him disease germs which give him colds, influenza or pneumonia and that even in the best regulated households in the north some person or other near him has a cold more than half the time, we can see the advantages of our pure circulating air.

Now take the matter of dust. Florida has less dust than states with wind-swept prairies and deserts, few dusty roads, less pollen-laden breezes that generate hay fever and asthma. Experiments carried out recently under the direction of the National Weather Bureau show that pollen from ragweed which causes 85% of the hay fever in the United States is practically absent in Florida's atmosphere.

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\*Prepared on request by Dr. W. A. Claxton, Field Medical Officer.

## BUREAU OF COMMUNICABLE DISEASES

In many northern cities and even in small towns, the air in winter is laden with coal dust. One cannot fully realize this except by experience.

Florida's sunshine has been praised over and over again and not without justification. The health-giving rays are always with us. An abundance of fresh vegetables and fruit is always at our door to give us a balanced diet.

With all these natural advantages to which we must add that of a comfortable temperature, we must still consider the great factor of rest in the care of tuberculosis. Persons with this disease should place themselves under the care of a good physician who can direct their exercise and minister to those minor ailments which appear from time to time. He can tell them when they should be in bed and when they should be up; whether they should take 15 minutes a day exercise or two hours a day.

The treatment of tuberculosis depends on a routine of living more than on the administration of drugs. No medicine or serum has been discovered that will cure tuberculosis.

## DOCTORS ARE HONEST

To reach the pinnacle of professional success in his profession, it is essential that a doctor be honest with himself and that usually makes him honest with others. He is taught truths at college, he seeks the truth from his patients in order that he may render them maximum service, and square dealing comes to be habitual. But why dwell on that? A few doctors, thinking to protect their patients or benefit the community or just from press of work or carelessness, may really do harm by failing to make accurate reports of communicable diseases and the causes of death. Is it more important to avoid some temporary reproach for having in the community a preventable disease or to admit its presence, face the issue, fight the cause of disease and avoid a harsher and merited reproach because of sickness and the loss of life which could have been averted?

## THE LOVE APPLE

There are people living today who well remember the time when tomatoes were called "love apples." They were said to be poisonous and were not used for food. Their importance in the daily diet of man depends on the vitamines they contain. Everyone should consume some fresh or canned tomatoes regularly. They are beneficial to all ages.

## REMEMBER

Diphtheria is most deadly to pre-school children. Get your doctor to immunize them.

## BUREAU OF COMMUNICABLE DISEASES

### WHY THE DEMONSTRATIONS?

One big objective of the State Board of Health is health education.

Malaria costs money.

Malaria can be prevented by avoiding mosquitoes.

The mosquito-proof home is the best protection.

Hookworm disease is expensive. It delays the progress of its victims. More groceries must be purchased to raise a child to the point of productiveness if he has hookworms.

A sanitary privy, used by all members of the household prevents soil contamination of hookworm disease.

Now the demonstrations are to demonstrate how to mosquito-proof the average, cheaply constructed, rural home and how to build a sanitary privy. That is health education.

The demonstrations are not for the benefit of the single family living on the premises, though the family is greatly benefited. Those premises are, according to agreement, open for inspection at all reasonable hours. Great interest has been shown in some places, in other places none. We are disappointed if the response of the community suggests indifference to these important health problems. It makes us wonder if we have failed to present the matter in its true light.

We hope that many wives will slip around and look the job over, then go home and tell their husbands about all the comforts and protection the neighbors are enjoying. Then we hope friend husband will take a day off and fix up the place. News of such doings would cheer us on greatly in our work.

### BELIEVE IT OR NOT

Measles and whooping cough are particularly deadly to young children. They should not be exposed.

Of the sixteen persons who died of diphtheria during the first four months of this year, twelve were under five years of age. Toxin-antitoxin would have saved them. It should be given by the family doctor at age six to twelve months. See your own doctor.

Hookworm disease results from contamination of the soil with human excrement. A sanitary privy, used by everyone, will prevent hookworm. Ask the State Board of Health for hookworm and privy bulletins.

**BUREAU OF COMMUNICABLE DISEASES****EVENTUALLY SMALLPOX WILL RETURN**

The periodical outbreak of smallpox is due to a gradually increased percentage of non-immunes. When there are enough of these in any section, then the first imported case acts like a spark in a tinder box—it starts things.

Those who have smallpox are the ones who have put off getting vaccinated until too late. Better ask the doctor to **vaccinate you and the children**. That is better even than to wait for the Board of Health doctor to come around.

**BUREAU OF ENGINEERING****E. L. Filby, C. E., Chief Engineer****SEWERAGE AND SEWAGE DISPOSAL IN FLORIDA—1930**

(Continued from August)

At Key West, our island city, there are no public sewers. A few private sewers exist but individual tanks are used if flush type toilets are installed. The lack of a public water supply prevents the installation of a modern sanitary sewer system. Salt water or brackish water from shallow wells in the rock is often used for toilet purposes.

Over on the West Coast we find flat topography, sandy soil and many long reaches of brackish water extending inland from the gulf. So we have the cities utilizing many outfalls into the river waters. Ft. Myers undertook an extensive sewerage program and built a lot of sanitary sewers in undeveloped subdivisions. Money ran out and a collecting outfall line was abandoned. The treatment plant was about one-third built and since has been abandoned. It was to be of the separate sludge digestion type but excessive infiltration and high pumping charges have led to by passing and practical abandoning of the plant at Billy's Creek. The group of cities on the Manatee River, Bradenton, Palmetto, Manatee and Ellenton, all utilize dilution of raw sewage and partial treatment in septic tanks. Tampa, the largest city on the West Coast, uses Imhoff tank treatment for a portion of its sewage but a large portion of the sewage goes into the Hillsborough River, raw. The Imhoff tank installations are overloaded and are a source of odor nuisance as the sludge is only partially digested.

St. Petersburg, the sunshine city, has a modern mechanical coarse and fine screen plant followed by chlorination. However, as the chlorination is not controlled by Ortho-tolidine, it is not continuous or effective. The ultimate disposal is into the bay through a long outfall. Clearwater uses a large septic tank installation and many small ones. Chlorination of the raw sewage before tank treatment was utilized to prevent odor nuisance. Perry, up in our lumber region, disposes of its sewage raw into a creek near town.

### BUREAU OF ENGINEERING

In the northeastern portion of our state, we have the St. Johns River system of large lakes. All cities on the river use dilution with or without tank treatment, first. Sanford and Green Cove Springs use the combined system of sewers.

In the central part of Florida, we have a ridge section of sand hills dotted with lakes in almost every depression. Solution channels have so dissolved the underlying structure of limestone that many lakes are found and few streams on the surface. Many of the lakes are connected underground, a few on the surface. Thus, we have such cities as Gainesville discharging into a large lake called Paynes Prairie and the University of Florida at Gainesville using Imhoff tank, sprinkling filter and discharge into a cavity in the limestone. Ocala, a city of 7,275 population, brings its sewage to two Imhoff tank installations and disposes of the effluent following roughing filters and chlorination into several drainage wells. Williston uses a septic tank and seepage into a limestone pit. There is no water course within miles of Williston, likewise, Ocala, where the nearest water course is Silver Springs run, five miles distant.

Orlando, the city beautiful, depends upon drainage wells entirely to dispose of its wastes. All storm water and sanitary sewage are discharged into these wells. Numerous lakes and ponds dot the city but the sewage is run through small septic tanks and thence into these wells. An expensive collection and pumping program must face Orlando for the time will come when the sewage wells must be abandoned. Wildwood, likewise, uses a drainage well for sewage disposal after Imhoff tank treatment and chlorination. Along the southern portion of the ridge, in the sand hill country, we have Haines City with a modern plant of clarifiers, separate sludge digestion tanks and natural sand filters. At Avon Park and Sebring, we have septic tanks and sand filters (natural). Lake Wales utilizes a septic tank and dilution. At Sebring, it is interesting to note that the sewage discharged into the sand beds never appears at the end of the under drains. At Winter Haven, popular prejudice against pollution of a lake has thrown out of use a sewerage system installed some six years ago while another system discharges after septic tank treatment into a large lake without nuisance. A sewage well installed at Winter Haven has not been used. At Lakeland, we have partial treatment by fine screens, a Dorr clarifier and separate sludge digestion. A bad mosquito nuisance is caused by the effluent as it discharges into a drainage canal. Depletion of the oxygen content of the stream prevents fish control of mosquito production, a control which is very effective upstream and some distance down stream.

These ridge and central Florida cities have had a rapid growth but many still depend on individual septic tanks for the soil is very porous and will absorb large quantities of liquid wastes. Houses in these cities are very scattered and the cost of sewers is oftentimes prohibitive, especially in view of the present bonded indebtedness of these cities.

(Concluded in October)

**BUREAU OF VITAL STATISTICS****Stewart G. Thompson, D. P. H., Director****KILLED BY MOTOR VEHICLES**

During the calendar year 1929, there were 496 persons in Florida killed by motor vehicles. Of that number, 392 were white, and 104 colored.

Duval County having, according to the census which has recently been taken, the greatest population of any county in the State, naturally leads in the greatest number of persons killed from this cause, having 68 deaths. Dade County was a close second with 65 and Hillsboro County was third with a total of 41.

Accidents caused by motor vehicles are not reportable in this state but we might draw reasonable deductions as to our own figures by comparison with information contained in a recent issue of the New York "Health News."

"The New York State Bureau of Motor Vehicles reports 34,402 people injured and 914 killed in motor vehicle accidents during the first five months of 1930, an increase of 72 deaths over the corresponding period in 1929. A study of the table prepared by the Bureau reveals some significant facts.

"It is evidently safer to ride than walk, for out of the total of 34,402 persons injured 18,136 were pedestrians while only 11,133 were hurt in collision with automobiles.

"Of the number of accidents involving pedestrians 4,198 were caused to persons crossing between intersections, 4,054 to children playing in the street, 2,710 to persons crossing intersections against signals, and 1,671 to pedestrians coming from behind a parked car. These facts speak for themselves. In cities the pedestrian is more often to blame for injuries received than the automobile driver.

"The greatest number of accidents (2,648) occurred between five and six p. m. during the homeward trend of travel; the next greatest between seven and eight p. m. (2,606). From eight to nine p. m. (2,468) and from six to nine p. m. (2,450) come next in numerical frequency.

"As might be expected, Sunday was the day on which most accidents (5,762) occurred with Saturday a close second (5,504). The other days of the week vary but little, Thursday having the lowest record, 4,297."

**BUREAU OF VITAL STATISTICS**

Deaths from Automobile Accidents in Florida by Color and by  
Counties—1929.

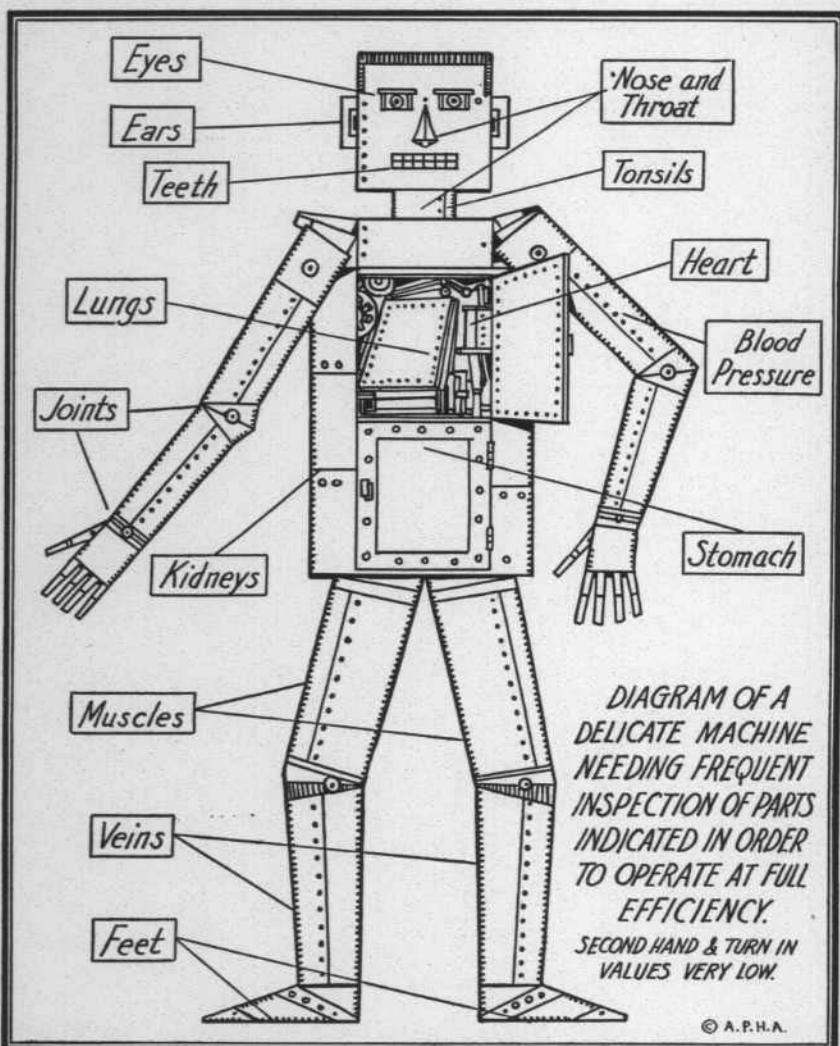
Counties	Total	White	Colored
0. State .....	496	392	104
1. Alachua .....	8	5	3
2. Baker .....	2	1	1
3. Bay .....	4	4	...
4. Bradford .....	4	3	1
5. Brevard .....	9	8	1
6. Broward .....	14	10	4
7. Calhoun .....	...	...	...
55. Charlotte .....	...	...	...
8. Citrus .....	2	1	1
9. Clay .....	1	1	...
62. Collier .....	3	3	...
10. Columbia .....	5	5	...
11. Dade .....	65	51	14
12. DeSoto .....	1	1	...
56. Dixie .....	...	...	...
13. Duval .....	68	50	18
14. Escambia .....	20	16	4
53. Flagler .....	...	...	...
15. Franklin .....	...	...	...
16. Gadsden .....	7	6	1
64. Gilchrist .....	1	1	...
57. Glades .....	1	1	...
65. Gulf .....	1	1	...
17. Hamilton .....	3	2	1
58. Hardee .....	...	...	...
63. Hendry .....	1	1	...
18. Hernando .....	4	3	1
59. Highlands .....	1	1	...
19. Hillsboro .....	41	39	2
20. Holmes .....	3	2	1
66. Indian River .....	3	3	...
21. Jackson .....	6	6	...

**BUREAU OF VITAL STATISTICS**

Deaths from Automobile Accidents in Florida by Color and by  
Counties—1929—(Continued)

Counties	Total	White	Colored
22. Jefferson .....	2	1	1
23. Lafayette .....	.....	.....	.....
24. Lake .....	7	4	3
25. Lee .....	5	4	1
26. Leon .....	9	5	4
27. Levy .....	3	3	.....
28. Liberty .....	.....	.....	.....
29. Madison .....	9	6	3
30. Manatee .....	6	3	3
31. Marion .....	15	10	5
67. Martin .....	3	3	.....
32. Monroe .....	1	.....	1
33. Nassau .....	2	2	.....
34. Okaloosa .....	3	2	1
54. Okeechobee .....	.....	.....	.....
35. Orange .....	19	15	4
36. Osceola .....	2	2	.....
37. Palm Beach .....	29	20	9
38. Pasco .....	7	6	1
39. Pinellas .....	15	14	1
40. Polk .....	17	14	3
41. Putnam .....	10	6	4
42. St. Johns .....	11	11	.....
43. St. Lucie .....	2	1	1
44. Santa Rosa .....	3	3	.....
60. Sarasota .....	8	7	1
45. Seminole .....	5	5	.....
46. Sumter .....	3	3	.....
47. Suwannee .....	2	1	1
48. Taylor .....	.....	.....	.....
61. Union .....	1	1	.....
49. Volusia .....	15	12	3
50. Wakulla .....	.....	.....	.....
51. Walton .....	4	3	1
52. Washington .....	.....	.....	.....

## SEE YOUR DOCTOR FOR SPARE PARTS



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# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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-Vol. 22

OCTOBER, 1930

No. 10

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

KNOCKS AND BOOSTS—*Hanson*

MILLIONS FOR DEFENSE—*Brink*

HIGH SCHOOL MORTALITY—*Thompson*

SEWERAGE AND SEWAGE DISPOSAL—*Filby*

A HALLOWE'EN TRIP TO THE STARS—*Cartoon*

PHYSICAL EXAMINATION BLANKS for TEACHERS—*Blachly*

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HENRY HANSON, M. D., STATE HEALTH OFFICER

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Jacksonville..... E. C. Stoy (U. S. P. H. S.)

## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### KNOCKS AND BOOSTS

Whenever a new enterprise is launched it is met with "knocks and boosts." It usually depends on how the new venture appears to affect the interests, occupation, or finances of the individual. It becomes a question of "politics" and each person has to decide whether he will be for or against. It is doubtful if there ever was a project of any kind which received universal support or approval when first made known to the people.

When, a few months ago, the State Board of Health began to take stock of the actual existing health conditions in the State, there were outstanding facts which at first glance looked serious. As these were studied, the added information pointed to two, three, or possibly four or five factors playing a big part in the retardation of progress in the rural communities. It seems that the farmer has been most neglected by the Health Department and that he and his family suffer more from preventable sickness than people in any other walk of life in the State of Florida. It is not right that it should be so. In the pioneer days in the west, the farmer was an object lesson in health and robustness. He can and soon will be in Florida.

Usually the man who opposes the County Health Unit plan is one who has not taken time to study the need for the unit and is laboring under the misapprehension that it will interfere with his private income. Other objectors are those who are always opposed to any change. We will soon convince the reasonable and fair-minded citizens of the practicability and correctness of our program in bringing the health service directly in through the farm house door, and then the members of the "anvil chorus" will be so busy shoeing horses, making and sharpening plow shares, etc., that they will forget what the original reason for knocking was.

The boosters are among those who wish to see Florida develop, and are willing to contribute their mite to this end. The booster realizes that the farmer must be given a chance. He must be kept well and working if he is to bring forth produce both in variety and quantity, which will establish markets and create a demand for Florida products. If the farmer is kept well, he will get out of debt and lay off the yoke of high interest rates. It would be better for the state to have more prosperous farmers and fewer finance corporations.

While it appears very probable that Florida will be chosen for the Soldiers' Home on account of its climate and health-giving sun rays, there are areas which will be rejected for the site owing to a high incidence of preventable disease. A county health service would remove such objections.

## ADMINISTRATION

The program has received knocks on the grounds of increased taxation. A recent calculation by a leading banker\* shows that the cost of preventable sickness in the State is equal to a 30 mill tax, or an equivalent of \$30.00 on every \$1,000.00 of assessed valuation. At the present time, each individual who pays taxes on an assessment of \$1,000.00, pays fifty cents a year toward the support of the State Board of Health and this is not enough to extend sufficient health service to the farmer. Some counties can put in a service for 1/10 of a mill (others will need 1, 1½ or 2 mills) which means that the person paying taxes on \$1,000.00 assessed valuation pays ten cents a year additional to provide for the County Unit. There would be no hesitation if this were proposed for hogs and some would enthuse over the idea if it were for poodles, Pekingese, or dogs in general, but since it is only for babies and children it seems ridiculous to become so sentimentally extravagant in a health program. Ten cents, fifty cents, one dollar, five dollars, ten dollars a year are about the average amounts as they would affect different classes and individuals. Bankers and business men wager and lose as much or more every time they play a game of golf.

By a cooperative arrangement with the Federal Health Service, we are able to offer one-third to one-half of the cost of the health unit from outside sources, and the county is only spending fifty to sixty-six cents to get a dollar.

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\*Mr. Chas. H. Mann, President of the State Board of Health.

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## SWIMMING REDUCES CHILDREN'S WEIGHT

Children tend to gain weight during the school year and to lose it during the summer, at least on the Pacific Coast, according to a study made in the public schools of Seattle described in the October Hygeia. Measurements of height and weight taken in the spring over a four-year period showed fewer underweight children than those taken in the fall.

The tendency to lose weight in the summer was strikingly shown in one school located on a point of land in Puget Sound. The shore is one continuous bathing beach and swimming in the cold waters of the Sound is the favorite summer sport. Since swimming in cold water is not conducive to putting on weight, the children of this school showed a wide variation in weight between their spring and fall measurements.

**BUREAU OF ENGINEERING****E. L. Filby, C. E., Chief Engineer****SEWERAGE AND SEWAGE DISPOSAL IN FLORIDA — 1930  
(Concluded)**

Cities are gradually awakening to their sewerage and sewage disposal problems and now that the so-called frills of municipal development, such as civic centers, golf courses, subdivision pavement, etc., are no more, we can expect progress along the lines of sewage disposal. In fact, the tendency has been to divert funds received from the sale of utilities to sewage treatment. No Florida city is utilizing a sewer service charge as no permissive bill has been passed by the legislature allowing such a levy. It is needed and will be introduced in the 1931 legislature as a State Board of Health measure.

There are no sanitary (sewerage) districts in Florida although there is a law authorizing one for the vicinity of Tampa. The State Board of Health has been active in trying to organize a district there to relieve the serious nuisance caused by the abandonment and non-maintenance of sanitary sewers built by subdividers in 1924-25-26. These systems were not carefully designed and were hastily built and now that the area is thickly settled, they are overloaded and going to pieces rapidly. The State Board of Health is without power to order the county commissioners to take steps to create the district and as the area in question is now in the courts seeking relief from paying certain drainage bonds and interest, it is dubious if the bonds could be sold should the district be organized.

Florida is primarily a frontier state. It is a state of woods, streams, lakes and vast uninhabited areas. Its water supplies come, and will continue to come for some time, from the underground waters. Salt and brackish waters are found where the largest cities are, thus affording dilution as a method of sewage disposal. The Isaak Walton Leagues, Women's Clubs, Garden Clubs, etc., are alive to the problem of waste disposal and we have little fear of the troubles of the northern and central states. Florida has little manufacturing that produces troublesome wastes. At times, our wood distillation plants cause trouble with their wastes, especially in times of very low run-off. Cannery wastes have not as yet entered the field of stream pollution. The creamery development is not extensive enough for consideration at this time although it is being watched and guidance given when possible to proper location of these plants.

Records of sewers and data as to connections, materials of construction and the like are hard to get due to the deflation after the boom and the resultant discharge by cities of the engineering staffs that built the sewers. The State Board of Health was swamped during the boom and could not keep pace with developments. It is felt, however, that the time will come when the cities will take cognizance of conditions and prepare the necessary maps and records of such an important utility as the sewer system.

The following table gives the name of the community having a sewer system—its population and approximate number of people served, if these data are available. It lists the type of sewers, the method of treatment and the final disposal of the liquid wastes. More detailed information is available but cannot be listed due to lack of space.

CITY	POPULA-TION*	NO. PEOPLE SERVED	SEWERAGE—SEWAGE TREATMENT AND DISPOSAL
Apalachicola	3,003	3,000	Combined Sewerage—no treatment—dilution into Brackish Apalachicola River
Arcadia	5,624	3,000	Separate Sewers—discharged raw into Peace River.
Avon Park	3,350	350	Separate Sewers—Coarse bar screens—Septic Tank—sand filtered—Lake.
Bartow	5,268	5,000	Separate Sewers—Dorr Clarifier—separate sludge digestion—Creek.
Blountstown	1,256	250	Separate Sewers—Septic Tank—Discharge into Creek.
Bonifay	1,185	—	Separate Sewers—2 Septic Tanks—Disposal into small ditches.
Boynton	1,041	200	Separate Sewers—Septic Tank—Disposal into Brackish Water—Canal.
Bradenton	5,876	5,000	Separate Sewers—11 Outfalls—No treatment. 18 Small Septic Tanks. Brackish River.
Brooksville	2,228	500	Separate Sewers—3 Imhoff Tanks—Disposal into lake and ditches.
Cedar Key	1,138	300	Separate Sewers—2 Septic Tanks—Disposal into Gulf.
Century	—	500	Separate Sewers—No treatment—Discharge into Creek.
Chipley	1,800	1,500	Separate Sewers—Imhoff Tank—Septic Tank—Disposal into 2 ditches.
Clearwater	7,532	7,000	Separate Sewers—1 Imhoff Tank—8 Septic Tanks—Chlorine—Odor control. Salt Water.
Cocoa	2,182	2,000	Separate Sewers—2 Septic Tanks—Final disposal salt water—Indian River.
Crystal River	863	350	Separate Sewers—Imhoff Tank—Disposal into salt water.
Dade City	1,802	1,500	Separate Sewers—Raw and Septic Tank into Lake.
Daytona Beach	16,761	12,000	Separate Sewers—Hand Coarse Screens—Mechanical Fine Screens—Chlorine—Brackish Water.
DeFuniak Springs	2,531	—	Separate Sewers—No treatment—Disposal into three small streams.
DeLand	7,429	5,000	Separate Sewers—2 Imhoff Tanks—Lake and land—Irrigation.
Delray Beach	2,250	2,000	Separate Sewers—Septic Tank—Brackish Canal Water.
Dunedin	1,455	1,200	Separate Sewers—2 Septic Tanks—1 Imhoff Tank—Disposal into salt water.
Dunnellon	1,103	1,000	Separate Sewers—No treatment—Disposal raw into river.
Ellenton	768	150	Separate Sewers—Septic Tank and raw into Brackish River.
Eustis	2,835	—	Separate Sewers—3 Septic Tanks—Discharge into Lake Eustis.
Fernandina	3,024	—	Separate Sewers—Discharge raw into Salt River.
Foley	—	1,000	Separate Sewers—No treatment—Discharge raw into river.
Ft. Lauderdale	8,445	1,200	Separate Sewers—No treatment—Dilution in Brackish River.
Ft. Meade	1,980	1,500	Separate Sewers—Septic Tank discharges into river.
Ft. Myers	8,905	—	6 Outfalls—No treatment—(By passing Sep. Sludge Plant). Brackish River.
Ft. Pierce	4,772	4,000	Separate Sewers—No treatment—Disposal raw into Indian River. (Salt).
Frostproof	1,406	250	Separate Sewers—Septic Tank discharging into lake.
Gainesville	10,530	8,000	Separate Sewers—Imhoff and Septic Tank—Disposal into small creek.
Graceville	1,009	500	Separate Sewers—Septic Tank disposal into creek.
Green Cove Springs	1,605	1,000	Combined Sewers—Disposal raw into St. Johns River.
Haines City	2,166	1,000	Separate Sewers—Clarifier—Separate Sludge Digestion. Sand Filters.
Hastings	673	400	Separate Sewers—Septic Tank—Disposal into creek.
Havana	2,617	500	Separate Sewers—Septic Tank—Disposal into creek.
Hollywood	2,939	300	Sewers take overflow from individual Septic Tanks—Disposal Salt Water.
Homestead	2,644	1,500	Separate Sewers—Septic Tank—Disposal into Ditch.
Inverness	1,356	1,000	Separate Sewers—4 Septic Tanks—Disposal into lake.
Jacksonville Beach	—	400	Separate Sewers—No Treatment—Disposal into Brackish Water.
Jacksonville	129,682	87,000	Separate Sewers—No treatment—Discharge raw into St. Johns River.
Jasper	2,027	700	Separate Sewers—Disposal by Dilution raw into creek.
Kissimmee	4,565	1,800	Separate Sewers—7 Septic Tanks—Disposal into ditches.
LaBelle	650	150	Separate Sewers—Disposal raw into river.
Lake Butler	2,300	200	Separate Sewers—Septic Tank and dilution into ditch.
Lake City	4,412	4,000	Separate Sewers—Clarifier—Separate Sludge Digestion—Chlorine—Sprinkling Filters. Final Sedimentation—Disposal into Stream.
Lakeland	18,549	15,000	Separate Sewers—Fine Screens—Clarifier—Separate Sludge Digestion—Ditch.
Lake Wales	3,407	1,000	Separate Sewers—Septic Tank—Dilution in Lake.
Lake Worth	5,887	—	Separate Sewers—Septic Tanks and disposal in salt lake.

**BUREAU OF ENGINEERING**

CITY	POPULA-TION*	NO. PEO-PLE SERVED	SEWERAGE—SEWAGE TREATMENT AND DISPOSAL	
			SEWERS	DISPOSAL
Lantana	200	100	Separate	Sewers—Disposal raw into salt Lake Worth.
Largo	1,416	—	Separate	Sewers—Septic Tank and dilution in ditch.
Leesburg	4,109	3,000	Separate	Sewers—Disposal through Septic Tank and dilution in ditch.
Live Oak	2,837	1,500	Separate	Sewers—Septic Tank—Disposal through drainage wells.
Lynn Haven	1,077	200	Separate	Sewers—Disposal through Septic Tank—Dilution in Brackish Water.
Madison	1,600	1,000	Separate	Sewers—Septic Tank—Final disposal in ditch.
Manatee	3,215	1,500	Separate	Sewers—Discharging raw into brackish Manatee River.
Marianna	3,434	2,000	Separate	Sewers—No treatment—Discharge raw into Lime Rock crevices.
Melbourne	2,642	—	Separate	Sewers—3 Septic Tanks discharging into brackish waters.
Miami Beach	6,474	6,474	Separate	Sewers—Discharge raw in salt water on outgoing tide.
Miami	110,025	60,000	Separate	Sewers—Small portion fine screened—Most discharged raw in salt water.
Milton	2,581	1,000	Separate	Sewers—Discharge raw into brackish river.
Monticello	1,823	—	Separate	Sewers—4 Septic Tanks—Discharge into ditches.
Mt. Dora	1,612	200	Separate	Sewers—Septic Tank discharges into lake.
Mulberry	2,029	1,500	Separate	Sewers—Imhoff Tank discharges into river.
New Port Richey	756	500	Separate	Sewers—Septic Tank discharges into brackish river.
New Smyrna	4,149	3,500	Separate	Sewers—Discharge raw into salt water.
Ocala	7,275	6,500	Separate	Sewers—Imhoff Tank roughing filter—Chlorine—Disposal in drainage wells.
Okeechobee	—	500	Separate	Sewers—Discharges raw and Septic Tank effluent into creek.
Orlando	27,263	25,000	Separate	Sewers—Discharge through Septic Tanks into drainage wells.
Palatka	6,397	4,000	Separate	Sewers—Discharge raw into St. Johns River.
Palm Beach	1,673	1,500	Separate	Sewers—Discharge raw into brackish Lake Worth.
Palmetto	3,034	1,500	Separate	Sewers—Disposal through 2 Septic Tanks and raw into brackish water—river.
Panama City	5,386	1,000	Separate	Sewers—Disposal raw and through 2 Septic Tanks into salt water.
Pensacola	31,455	25,000	Separate	Sewers—Discharge raw into salt water.
Perry	2,823	—	Separate	Sewers—Discharge raw into creek.
Plant City	6,811	—	Separate	Sewers—Imhoff and Septic Tanks discharge into ditches.
Pompano	2,482	150	Separate	Sewers—Discharge through Septic Tank into ditch.
Punta Gorda	2,100	2,000	Separate	Sewers—Discharges through 2 Septic Tanks into brackish water.
Quincy	4,311	3,000	Separate	Sewers—Discharge through Septic Tanks into creek.
Safety Harbor	760	300	Separate	Sewers—Discharge through Septic Tank into brackish water.
Sanford	10,003	8,362	Combined	Sewers—Discharging raw into St. Johns River.
Sarasota	8,385	6,000	Separate	Sewers—Discharge raw and through Septic Tanks into salt water.
Sebring	2,797	1,000	Separate	Sewers—Septic Tank—Sand filters.
South Jacksonville	5,654	5,000	Separate	Sewers—Discharge raw into St. Johns River.
Starke	1,275	800	Separate	Sewers—Discharge through Imhoff Tanks into creek.
St. Augustine	13,266	12,000	Separate	Sewers—Discharge raw into salt water.
St. Cloud	1,855	1,200	Separate	Sewers—Discharge through Septic Tanks into lake.
St. Petersburg	39,504	18,000	Separate	Sewers—Mechanical coarse and fine screen—Chlorination. Disposal into salt water.
Stuart	1,400	500	Separate	Sewers—Discharge raw into brackish water.
Tallahassee	10,744	4,000	Separate	Sewers—Discharge through Septic Tank and contact beds into ditches.
Tampa	100,910	—	Separate	Sewers—Imhoff Tank—Septic Tank and raw sewage into brackish waters.
Tarpon Springs	3,418	2,500	Separate	Sewers—Discharge through Septic Tanks into brackish waters.
Titusville	2,080	500	Separate	Sewers—Discharge through Septic Tanks into ditches.
Umatilla	975	250	Separate	Sewers—Discharge through Septic Tank into Lake.
Vero Beach	2,272	2,000	Separate	Sewers—Clarifier—Separate sludge digestion—Disposal into ditch.
Wauchula	2,574	—	Separate	Sewers—Discharge raw and through Septic Tank into river.
West Palm Beach	21,328	—	Separate	Sewers—Discharge through Septic Tank into salt water.
White Springs	800	200	Separate	Sewers—Discharge through Septic tank into river.
Wildwood	979	250	Separate	Sewers—Imhoff Tank—Chlorination—Disposal into drainage well.
Williston	594	300	Separate	Sewers—Disposal through Septic Tanks into Lime Sink Hole.
Winter Garden	2,321	1,000	Separate	Sewers—Discharge through Septic Tank into Lake.
Winter Haven	7,118	1,500	Separate	Sewers—Discharge through Septic Tank into Lake.
Winter Park	3,646	1,500	Separate	Sewers—Discharge through Imhoff Tank into creek.
Zolfo Springs	—	100	Separate	Sewers—Discharges raw into creek.

\*Population figures secured from newspaper releases, city clerks and estimates when no official figures were available.

**CHILD HYGIENE AND PUBLIC HEALTH NURSING****Lucile Spire Blachly, M. D., Director****PHYSICAL EXAMINATION BLANKS FOR TEACHERS**

Requests are now coming in for physical examination forms for teachers. Heretofore, two blanks have been supplied—one, merely a statement from the doctor to the effect that the applicant has been examined and no evidence of communicable disease found; the other, a fairly comprehensive card covering the physical findings but with little space for the history and present health habits of the candidate. Both forms seem inadequate so the periodic health examination forms prepared and published by the American Medical Association are being offered to all applicants. This form is 8 x 10½ inches with space for data on both sides—one side covering the usual social data, i. e., name, address, age, etc.; occupation; conditions of work, whether satisfactory, monotonous, fatiguing; home conditions, whether congenial, depressing, quiet, irritating; sleeping conditions, hours in bed, windows open, restful or disturbed; food habits, as to regularity, quantity, eating between meals, time of meals, variety—as regards meats and proteins, green leafy vegetables, potatoes, pastries, sweets, fruits, salads; liquids used, kind and quantity; candy and sweet-meat habits; use of tobacco; habits of elimination; exercise; social, political, and club associations; recreations; hobbies; tendency to worry; moods, periods of alternating gloom and cheerfulness; past and present illnesses, i. e., tuberculosis, malaria, frequent colds, severe headaches, etc.; present indispositions, loss of appetite, colds, cramps, palpitations; immunizations and vaccination status and history; history of accidents; present condition of teeth and mouth; habits of going to the dentist; family history; special queries. On the opposite page space is allowed for physical data with room for summary and advice to candidate.

Although not perfect, this form has many advantages over most others, among them being, (a) the applicant may fill out the history—and habits—side of the card in his own room, thus giving him ample time to call to mind any and all deviations from the normal so the examining physician may have a true mental picture of the applicant when he makes the examination; (b) space for defects found is so arranged that none need be wasted on negative findings.

It is assumed that now that the recommendations of the Joint Committee of the National Education Association and the American Medical Association have had a period of nearly a decade in which to permeate the consciousness and consciences of the teaching fraternity there is no teacher left who feels he has discharged his duty to himself, his family—born or unborn—or his pupils, when he simply rushes in to his old family physician and well-wisher with a hurried request to sign him up as all "fit as a fiddle" so he can "get the job." That sort of thing is on a par with the intelligence used by the nitwit of the nineties who is reported (by vaudevillists) to have slipped his letter, un-

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

stamped, into the slot of the village post office when the postmaster wasn't looking.

Teachers are human beings and all human beings are subject to physical and mental ills. These ills are much more amenable to treatment and to complete cure if detected in their incipiency. Likewise, the detection of disease in its incipiency is unquestionably more difficult, as well as more important, than after it is well-established, so time, skill, preparation, and equipment are necessary essentials on the part of the examiner, and time and active, sympathetic cooperation on the part of the candidate are imperative.

Experience has shown that the periodic physical examination is a factor in the extension of the span of life and increases the efficiency of the examined to such a degree that the monetary cost is returned many fold to the candidate during his life time—not to mention the added happiness that comes from healthful living habits so rendered possible. A simple request stating name, age, and school will bring you the proper form.

Theodore Roosevelt has said: "Every man owes something to the up-building of the profession to which he belongs." There is no better way of building up the teaching profession than for the teacher to set the example of intelligent conservation of health for his pupils and his community.

### Maternity Letters

The Bureau of Child Hygiene and Public Health Nursing has two sets of letters for the expectant mothers of Florida—one for those who intend using a midwife for the delivery, the other for those who intend using a physician.

If the reader desires these letters for herself, some member of the family, some friend or neighbor, please fill out the coupon below, giving the name of the expectant mother and send it to Bureau of Child Hygiene and Public Health Nursing, State Board of Health, Jacksonville, Florida.

Name .....

Address .....

County .....

Date of Expected Confinement .....

No. living children..... No. children dead.....

Age..... Color.....

Will a doctor or a midwife attend confinement? .....

Referred by .....

State whether the above is a nurse, doctor, midwife, friend, or relative.

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****MILLIONS FOR DEFENSE**

It is now twenty-seven years since the presence of hookworm disease was recognized by Drs. Adamson and Helms of Tampa and called to the attention of the State Board of Health. This marked the beginning in Florida of the sanitation and treatment campaign for the eradication of the disease which has not yet been finished and will not be until our fair State is free of the parasite. Such a happy event will transpire when every householder adopts such measures as will prevent the contamination of soil with human wastes.

The twenty-seven year campaign may, indeed, have cost the State millions of dollars in services rendered by the State Board of Health alone. These services have included free laboratory diagnosis, free distribution of drugs, printing and distributing educational bulletins and the field service of doctors, nurses and sanitary officers. Other defense costs paid by county and city governments and individuals cannot be even roughly estimated but must have been enormous.

**How Much For Tribute?**

Although an amazing amount of good has been accomplished by our consistent efforts to eradicate the hookworm, we are still sustaining a large annual loss from its ravages. We do not see nearly as many children who are obvious and extreme sufferers but still there are too many of these in the more remote rural sections where medical attendance is not easy to get.

There are many others who, though not severely affected, are yet laboring under a handicap of lesser degree.

There is no doubt that hookworms render one more susceptible to other diseases, particularly tuberculosis and malaria.

**Who Cares?**

Even practicing physicians want to see hookworm disease eradicated. Rather than a source of revenue it is, to them, as to everyone, an economic handicap. Teachers who want their pupils to do creditable work and preachers who seek to raise the spiritual and moral tone of their people are arch enemies of his satanic majesty, the hookworm. The merchant can sell more goods and collect more promptly, the employer can get more work from his help and the employee can earn better pay if the hookworm handicap is removed from the community. Parents can enjoy their children more and children will better appreciate their parents. In short, there is no individual, class or business interest but is injured by the presence of hookworm disease and benefited by its eradication.

## BUREAU OF COMMUNICABLE DISEASES

There is but one way to get rid of hookworms and that is by sanitation. It can be done individually or collectively. The cost is relatively low and the returns enormous. You can get full directions from the State Board of Health.

### To Report or Not to Report

During the first week of September, morbidity reports were received by this Bureau from fourteen counties and out of the other fifty-three counties with a total population of 750,000, not one case of any of the forty reportable diseases was reported.

The statutes of Florida and the rules of the State Board of Health are specific in requiring that every person who treats or examines any person having or suspected of having a notifiable disease must report. This includes not only doctors but school teachers, hospital superintendents, etc., and a penalty as for misdemeanor may be imposed for failure to report.

There is no reasonable excuse for neglect or failure to report. Report cards are furnished free on request and no postage is required.

The State Board of Health is endeavoring to render service to all the people of Florida. The doctor who fails to cooperate by concealing or failing to report is doing himself and his patrons an injustice. He is assuming an unnecessary and unwarranted responsibility, exposing his community and perhaps his own family to the dangers of preventable disease and laying himself liable to prosecution.

Although quarantine becomes automatically operative upon recognition of a quarantinable disease and although physicians usually discharge their duty to isolate immediately, the power to quarantine is vested primarily in the State Board of Health and the responsibility for protection of the public is accepted when the report is received.

### Pellagra

Deficiency of diet is quite generally accepted as the cause or at least one of the causes of pellagra. Most of the patients are found to have eaten an unbalanced diet, although some few of these have been provided with proper food and failed to eat properly.

Unemployment and the attendant shortage of funds probably accounts for this year's increase in pellagra. Fresh milk, eggs, meat, fruit and vegetables should be included in the daily diet. Brewer's yeast, fresh or dried, and a liberal allowance of tomatoes or tomato juice seem to contain most valuable curative substances. Every patient should be attended by a physician.

## BUREAU OF VITAL STATISTICS

**Stewart G. Thompson, D. P. H., Director**



### HIGH SCHOOL AGE MORTALITY

Many of our Florida cities are justified in boasting of their beautiful high school buildings. There are more of our fine boys and girls in high school this fall than in any other period in the history of our nation. Good teachers, fine buildings, playgrounds, gymnasiums and athletic teams at all times command the interest of parents and the public in general. Every high school boy and girl should have protection from unnecessary and preventable disease and accident. It is reasonably easy to attract the attention of high school officials, city officials, our parent-teacher associations and others to the necessity for proper ventilation, protection against fire hazards and, to a more or less degree, medical examinations and sanitation. When it comes to the boy or girl, however, who falls out of the ranks, stays at home for a period and then passes away, he or she may be missed for a short time but eventually will be forgotten. The termination of a life may have been due to typhoid fever, tuberculosis, automobile accident or other preventable cause.

The value given in protection by life insurance is accepted universally in this country. Premiums for life insurance are governed by data secured through the classification of information contained in death certificates. Your attention is, therefore, directed at this time to the leading causes of deaths in the age group 15 to 19, inclusive, which very closely adheres to what is known as the high school age. In the Health Notes of October last year, the percentage of deaths from the ten leading causes of deaths in the age group to which we have just referred appeared on pages 134 and 135 by color in graphic form. Similar charts appear in this issue for 1929 which is a year later.

The greatest killer last year in what we have termed the high school age (for whites) was accidents from automobiles. This should be a warning. Is there any unnecessary risk taken by boys and girls of high school ages? Are the deaths charged against this cause from accidents en route to and from high school or during high school assembly periods? Since the automobile represents the greatest danger to the life of the high school boy and girl, it is a problem which should challenge the attention and action of those in power.

One of the outstanding features presented by the first chart (for white population) is that tuberculosis does not appear as one of the ten leading causes of death in this age group while for the previous year (1928) tuberculosis ranked fifth. Typhoid fever ranks sixth for 1929 and held the same rank for the previous year. This preventable disease might well receive more attention in the high school age. Homicides are not included while this cause ranked tenth in the publication last

**BUREAU OF VITAL STATISTICS**

year. Chronic nephritis, you will note, is eighth and heart disease ninth, out-ranking tuberculosis and homicides last year among white boys and girls of this age.

It would be interesting to comment on the ten leading causes in this group among the boys and also among the girls as well as to discuss the causes most fatal to the colored population. Since space will not permit such a discourse, the first column of the first chart has been used for comment which is under the caption "Total White." Those who are interested will be able to continue the study by comparing the two charts in this issue with the ones published in October of last year.

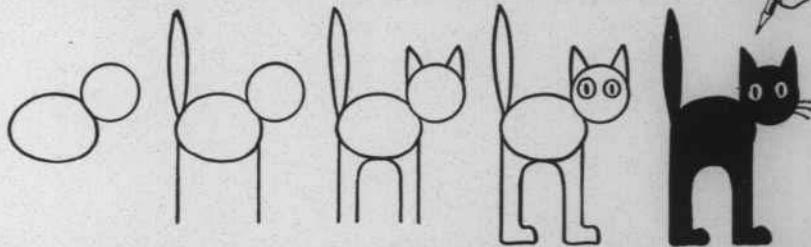
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**Grow Old Happily**

Growing old happily is a matter of adjustment to the inevitable physical and mental changes that accompany age. The factors that make for successful adjustment are: good heredity, sound physical health and unimpaired senses, satisfactory social environment and economic independence and security, according to Dr. Clifford B. Farr, a specialist in mental hygiene, writing in *Hygeia* for October.

Mental hygiene is frequently consciously employed by persons who are entering the period of advanced life and they need no outside help or interference. Others, however, especially those who take too depressive a view of life, need advice and encouragement to enable them to spend this age period happily.

On the whole, under favorable conditions of physical and mental health and normal average environment, advanced life is not a period of undue mental hazards, but one in which we tend to make the most successful personal adjustment.

**A LITTLE DRAWING LESSON**

This is how you draw a HALLOWEEN pussy in five stages.

## BUREAU OF VITAL STATISTICS

Leading Causes of Death in Age Group 15-19  
White Population — 1929

TOTAL WHITE	MALE	FEMALE
Automobile Accidents - 12 %	Automobile Accidents - 14 %	Puerperal State - 19 %
Puerperal State - 8 %	Pneumonia - 8 % (All Forms)	
Pneumonia - 7 % (All Forms)	Influenza - 7 % (All Forms)	Automobile Accidents - 10 %
Influenza - 5 % (All Forms)	Accidental Drowning - 5 %	Appendicitis - 6 %
Appendicitis - 5 %	Homicides - 5 %	Pneumonia - 5 % (All Forms)
Typhoid Fever - 4 %	Appendicitis - 4 %	Typhoid Fever - 5 %
Malaria - 4 %	Malaria - 4 %	Heart Disease - 5 %
Chronic Nephritis - 4 %	Suicides - 4 %	Tuberculosis - 5 % (All Forms)
Heart Disease - 4 %	Chronic Nephritis - 3 %	Chronic Nephritis - 5 %
Accidental Drowning - 4 %	Traumatism by Firearms - 3 %	Malaria - 4 %
		Influenza - 4 % (All Forms)



"We stop playing, not because we grow old; we grow old because we stop playing."

Herbert Spencer.

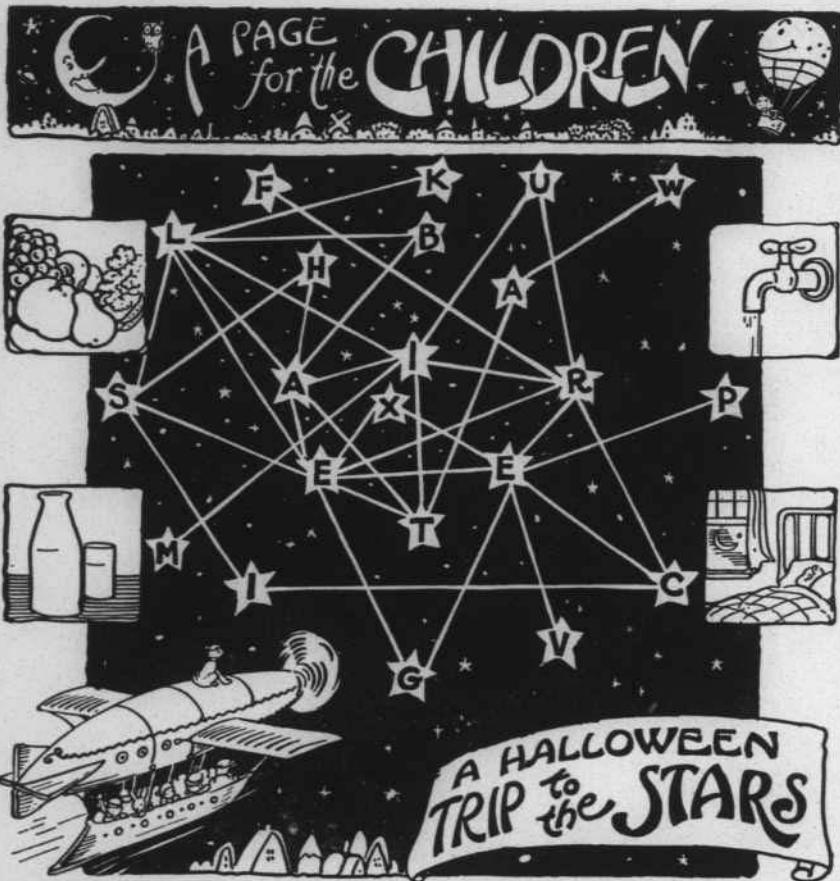
## BUREAU OF VITAL STATISTICS

Leading Causes of Death in Age Group 15-19

Colored Population — 1929

TOTAL COLORED	MALE	FEMALE
Tuberculosis - 23 % (All Forms)	Tuberculosis - 24 % (All Forms)	Tuberculosis - 22 % (All Forms)
Puerperal State - 8 %	Influenza - 9 % (All Forms)	Puerperal State - 14 %
Influenza - 7 % (All Forms)	Malaria - 8 %	Influenza - 6 % (All Forms)
Malaria - 6 %	Homicides - 6 %	Heart Disease - 6 %
Homicides - 6 %	Railroad Accidents - 6 %	Pneumonia - 6 % (All Forms)
Pneumonia - 5 % (All Forms)	Traumatism by Firearms - 5 %	Malaria - 5 %
Heart Disease - 4 %	Accidental Drowning - 4 %	Pellagra - 5 %
Syphilis - 3 %	Pneumonia - 3 % (All Forms)	Homicides - 5 %
Traumatism by Firearms - 3 %	Typhoid Fever - 3 %	Syphilis - 5 %
Pellagra - 3 %	Tetanus - 3 %	Chronic Nephritis - 3 %





SEE how many things that are good for your health you can spell out by travelling from one star to another. Some of them are suggested in the small squares, and there are at least eight all together.

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# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

NOVEMBER, 1930

No. 11

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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## ADMINISTRATION

**Henry Hanson, M. D., State Health Officer**

### HEALTH AND ECONOMICS

One appearing before Civic Clubs often wonders what the individual interest of the club is. Why does one belong to a club? In the present disturbed social and economic conditions everyone is seeking adjustments and offering panaceas for the prevailing ills. As I travel over the state, I hear many proposals for correcting unsatisfactory conditions and it would appear that the coming legislature is to be a very much occupied body of men.

The most startling remedy proposed is that of reducing the salaries of all state officials including the Governor and his cabinet. This is so absurd as not to be worthy of note but I mention it to illustrate a trend, a mental state engendered by the unprecedented number of bank failures following a wicked boom. A mental state of this kind is an illustration of grasping at straws and letting the beams and floats, which would support and carry one over the crises, pass by unobserved. The result of action of this kind is graphically illustrated by an assumption that if the entire salary of the Governor and his whole cabinet were wiped out the man who pays taxes on \$1000.00 of assessed valuation would save 11.6¢ a year. Since it is not proposed, however, to take their entire salaries away the saving would be too small to be noticed. It would seem that more sound thought should be given to the proposed remedies and if economies are to be practiced they should not be of such a nature as to discourage or disrupt the morale of officials within the state who at the present time are not receiving more than a very modest income which permits only a bare living without any provision for that period of life when one's activity is reduced and when one should have something laid up to take care of an on-coming old age.

The above may lead one to think that there are other interests wishing to hide matters having a more direct bearing on the high tax rate and in centering attention on a futile spectacular effort to camouflage the real "nigger in the wood pile."

I am in entire sympathy with sound economy but there are a group of public officials who are indispensable to government and who must devote their entire time and energy towards the discharge of the function of government office. If such individuals are not paid a living, they are forced to seek income from outside sources.

It is not my plan to discuss either general legislation or general economics but I hope to indicate some conditions prevailing in the general health of Florida which may point to the possibility of a greater revenue from approximately the same amount of energy expended. It has been the experience of all great enterprises established in tropical and subtropical countries that the first point of consideration is health. The old outstanding illustration of the

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Panama Canal is one of the most conclusive of such examples. The Americans found, in 1906, that yellow fever was only one of the factors which militated against the successful building of the Canal. The greatest obstacle at that time appeared to be malaria. The Tropical Oil Company when it began its operations in Beranca Bermeja, on the Magdalena River in Colombia, had an initial malaria rate of 1500 per 1000 employees\* and found that the first investment required was safeguarding the health of its employees:

In Florida, our greatest economic handicap is the health condition in our rural communities, as a result of the prevalence of hookworm and malaria. During 1929, a total of 470 deaths from malaria was reported which, on the basis of average severity of this disease in the Florida latitude, would indicate that there were approximately 94,000 clinical cases, representing a financial loss from sickness, from this one disease alone, of not less than \$500,000.00. This does not take into consideration the lowered production and the interference with raising crops and other activities which this sickness has caused. We have also a prevalence of hookworm disease which among groups examined runs from 25 % to 80 % of those examined.

Recently, in a discussion of sickness, one of the leading bankers estimated that the cost of preventable sickness in the state amounted to approximately \$15,000,000.00 or the equivalent of a 30 mill tax. The state at the present time provides  $\frac{1}{2}$  mill for the entire health program within the state which does not appear to be an appropriate investment when one considers what preventable illness is costing. The most effective manner of combating the poor health conditions throughout the rural communities consists in carrying the health activity directly to the people affected, namely, the farmer, and it appears that the full-time county health unit most nearly offers the solution for this condition. A certain amount of legislation will be necessary to enable the health department to give the relief required to those who are sick from preventable diseases. This requires an enabling act authorizing counties to appropriate money for health work within the county and also an act which authorizes the State Board of Health to receive outside funds which will be made available to supplement the cost of the rural health program.

The object of the program outlined is to convert the farmer from his present condition of being virtually a non-producer of taxes to a tax producer with increased earning capacity and spending power.

This discussion is intended to point out more effective means of state economies than simply slashing certain salaries regardless of merit. It is not intended to defend useless or superfluous positions but it is hoped that careful consideration will be given before handicapping those who are rendering effective service and giving value received.

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\*The 1,500 cases per 1,000 employees came about due to several having 2 or 3 attacks during same year.

**CHILD HYGIENE AND PUBLIC HEALTH NURSING****Lucile Spire Blachly, M. D., Director****THE NEW PROGRAM IN THE FIELD**

As announced in the September issue of Health Notes, the new program dates from the first day of that month. Preliminary to the introduction of the Child Hygiene Week Campaign, a part of the nursing staff was detailed to make county social assets surveys of their respective districts, and others to working out the technique of the demonstrations, exhibits, and child health conferences which compose the Child Hygiene Week's activities.

**Purpose of the Surveys.** The surveys have been and are being made to introduce the new program and to ascertain where both the need and the realization of the need are the greatest. To date the following counties have been surveyed: Nassau and a portion of Duval in District Number One, composed of Nassau, Duval, Clay, St. Johns, Putnam, Flagler, Marion and Volusia—nurse for this District, Miss Mary G. Dodd;

Dade and Broward in District Number Two composed of Seminole, Orange, Brevard, Osceola, Indian River, Okeechobee, St. Lucie, Martin, Palm Beach, Broward, and Dade—nurse for this District, Miss Sarah Ida Richards;

DeSoto and Charlotte in District Number Three composed of Polk, Hardee, Highlands, DeSoto, Charlotte, Glades, Lee, Hendry, Collier, Monroe—nurse for this District, Miss Jule O. Graves;

Baker, Gilchrist, Hamilton, Columbia, Suwannee in District Number Five, composed of these counties and Union, Bradford, Alachua and Levy;

Wakulla, Franklin and Leon in District Number Six composed of these counties and Jefferson, Madison, LaFayette, Dixie—nurse for this District, Mrs. Thora Roberts;

Okaloosa and Santa Rosa in District Number Eight composed of these counties and Escambia, Walton, Washington and Bay—nurse for this District, Miss Nanna Colby.

Survey work has not started in District Number Four composed of Citrus, Sumter, Lake, Hernando, Pasco, Pinellas, Hillsboro, Manatee and Sarasota Counties as the nurse for this District, Miss Joyce Ely, has been working out the details of the demonstrations. She has been assisted by Miss Lalla Goggans.

**CHILD HYGIENE WEEK IN SOUTH JACKSONVILLE**

Preliminary to Child Hygiene Week in South Jacksonville, carried out on joint invitation by the Woman's Club and the Parent-Teacher Associations, a social assets' survey was made by Miss Clio McLaughlin, Chief of the Bureau of Public Health Nursing, and Miss

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

Mary G. Dodd. This program marked the introduction of the campaign to the state.

On October 2nd and 3rd, forty-seven children ranging in ages from 7 to 59 months were examined by Dr. Lucile Spire Blachly and Dr. N. J. Phillips. On the 4th, a mothers' meeting was held. Miss Memphis Wood, instructor in art, talked on "Art and Health;" Mrs. Jessie DeVore, assistant director of music, on "Music and Health"; and Dr. Blachly on "The Need of Healthy Mothers and Healthy Children". Tea was served. The following exhibits were put on display: books for parents and children; toys suitable to the infant and preschool period; tools suitable to the preschool, school and adolescent ages; maternity and infancy equipment, etc.

On Monday, an all day's Health Institute attended by thirty-two delegates from as many organizations, and sub-organizations, was held with the following program given:

- 8:45 - 9:00—Roll Call.
- 9:00 - 9:20—The Program of the Board of Health—Dr. Henry Hanson, State Health Officer.
- 9:20 - 9:30—Explanation of Exhibits—Miss Goggans.
- 9:30 - 10:00—Nutrition—Dr. Blachly.
- 10:00 - 10:15—Recess.
- 10:15 - 10:35—Demonstration—Baby's First Foods—Miss Ely.
- 10:35 - 11:00—Character Building in the Preschool Child—Dr. Blachly.
- 11:00 - 11:30—Demonstration—Baby's Bath—Miss Goggans.
- 11:30 - 2:00—Noon Recess.
- 2:00 - 2:30—The School Child's Health—Dr. Blachly.
- 2:30 - 2:45—Demonstration—The Baby's Bed—Miss Ely.
- 2:45 - 3:10—Demonstration—The Confinement Room—Dr. Blachly.
- 3:10 - 3:25—Literature from the State Health Department—Miss Ely.
- 3:25 - 3:40—Recess.
- 3:40 - 4:00—The Health of the Adolescent—Dr. Blachly.
- 4:00 - 4:30—Demonstration—Baby's Tray and Mother's Tray—Miss Goggans.
- 4:30 - 5:00—Summing Up—Dr. Blachly.

The outstanding feature of the Child Health Conference, as shown by an analysis of the physical examination records of the children, was the almost total neglect on the part of the parents to protect the children from the preventable, communicable diseases. Of the forty-seven children examined, only three had had toxin-antitoxin, none had been vaccinated against smallpox, none had been tuberculin tested, one only had had the Schick test and one typhoid vaccines. Four had had no orange or fruit juices, six no cereal, eight no leafy

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

green vegetables. 47% had been nursed up to the seventh month or beyond.

The professional work involved was carried on by all the members of the staff of the Bureau, assisted by Miss Mary Louise Frazee, school nurse, and Dr. Phillips. Dr. Henry Hanson outlined the whole State Board of Health program at the beginning of the Health Institute.

## BUREAU OF ENGINEERING

**Ellsworth L. Filby, C. E., Chief Engineer**

### REPORT SNIPPINGS

Here and there among the prosaic daily reports of the field staff of the Bureau of Engineering are items of interest such as:

Down in Tampa recently, Sanitary Officer Osborn, in investigating a typhoid case, discovered that the sick negro was a "clay eater". Clay was one of his regular items of food and until September last he received his clay via parcel post from Stockton, Georgia. Times got hard, remittances back to Georgia ceased and no clay was forthcoming. A local supply from the railroad-cut nearby was developed. Alas:—Certain privies drained into the cut, railroad wastes were deposited therein, rains contaminated the food supply and possibly there was a typhoid germ or so left on the clay.

After the clay eaters came "bat roosts." A citizen phoned the Tampa office that a vacant house had become a bat roost and it was a nuisance. Call the Health Department

Over at Daytona Beach, one small child discovered a monkey on board a private yacht. Despite a sign "Monkey Bites" the child proceeded to investigate and the youngster went home crying from being bitten. Possibly with visions of "mad dog" in mind, the fond parent complained and asked the city manager and city attorney to have the animal penned up. The sign plainly stated that the animal should not be annoyed. There has been no evidence of rabies although five days have elapsed since the child was bitten. Monkey business!

Automobiles influence health? Right. But when they have lived their day and are piled up in a wrecking or junk yard, are they a health menace? Granted their presence is detrimental to property values, no one can get them removed—call on the State Health Department! We scramble about the pile but find no evidence of the cars holding water, thus being potential mosquito breeding places. Our regrets to the complainant.

Down on our Gold Coast, between Palm and Miami Beaches,

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lives a winter resident from up north. Adjoining is a poorer family who balances income with necessity by keeping a few chickens. Not being scientific poultrymen, they have a few roosters in the flock and their crowing has in the past annoyed our winter resident—in fact, so much so that it has impaired her health and she cannot return next winter until she is assured by the State Health Department that the cocks have been subdued. Insinuation is made that the cocks are raised for gaining purposes. A check-up finds no sanitary nuisance, chicken yard in excellent sanitary condition and prospects of chicken stew this winter for non-layers. We hope our winter resident will return.

Newspaper reports: "Seminole Indians in desperate circumstances out in the Everglades. Sanitation very bad and food supply depleted." Sanitary Officer Renney proceeded to Immokalee and found that our native American has had to leave his good hunting ground on account of high water. Near civilization, of course, hunting and fishing are not so good. He reports: Money is scarce; nothing much to barter with, and roads under water even for Model T open cars; usual Indian cleanliness (?) about the camp; that terrible stench which comes from "Kumpke," a root which is ground up into a flour and then baked into a bread; a water supply from a very shallow well; no method of waste disposal; one Indian sick, apparently with tuberculosis. Explanations were made to a chief who understood some English as to care of sputum and wastes. A new water supply was located for their use, suspected case reported to medical department. Modern influences were apparent: Model T open touring cars, canned tomatoes, white bread, moonshine—civilizing influences, but public health has not yet made much impression. Hookworm, however, has. A problem, indeed.

Way out west, as it were, near Pensacola, Sanitary Officer Hobbs was checking school sanitation and the school teacher casually remarked that she wished something could be done to help one of the children who apparently was broken out with a rash. A casual inquiry revealed that the child was badly bitten by mosquitoes. An inspection of the place where the child lived revealed it to be a hovel out at a garbage dump maintained by a private garbage disposal contractor. The family pitted their intelligence against a herd of boys' energy in securing food and salvage from the dump. The flies and mosquitoes were so numerous, their hum rivaled the drove of Navy training planes above. But the hum of Inspector Hobbs' motor soon droned into the distance and action was started to properly care for the family and to put the dump into decent shape, to control fly and mosquito breeding and to prevent the salvage of foodstuffs for human consumption from the dump.

Millions of mosquitoes—literally covering the bushes and breaking them down—running stock crazy, people unable to stay in their houses, and the Paris green dusting program advocated by the State Board of Health killing fish by thousands instead of the mosquitoes! An official inspection requested. Three days spent on Lake Talquin

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with hundreds of dips for larvae and only a few found—two dead gar fish and one dead alligator found through aid of the buzzards. Unofficially, one fish trap was found with some frying size fish therein—alive and kicking although they were just under the surface which had been dusted with 10% Paris green mixture a few days previously. And the mosquitoes! A flash light—daylight inspection of the home most complained of revealed no adults resting therein. The bushes were alive with midges—very much like the mosquito but which when they rest on your body do not bite—casual demonstration to the complainant and the drinks (soft) were on him!

These experiences and others are all in the day's work of inspections, checking and studying our problems—to make Florida a better, safer, more prosperous place to live in—a place where we can live longer and more useful lives, where we can fulfill our destiny of making the land a better place in which to live. Florida—the Land of Sunshine and Eternal Youth!

## BUREAU OF DIAGNOSTIC LABORATORIES

**Paul Eaton, M. D., D. P. H., Director**

### THE PLACE OF THE LABORATORY IN MEDICINE

In the library of the State Board of Health there is a little book entitled "Medical Thermometry and Human Temperature". It was published in 1872, for the purpose of inducing physicians to use the thermometer in finding out whether or not their patients had fever. Up to that time, and indeed for several years more, it was the general habit of physicians to judge the degree of fever by the sense of touch.

It is both amusing and pathetic that for many years after the introduction of the thermometer there were physicians who claimed that the thermometer was less accurate than the hand of the educated physician, that it gave fallacious reports. It is not hard to see how this came about. Through years of training and experience, they had become accustomed to judge a patient's condition by his general appearance as well as by the sensation perceived from his skin. We know that the temperature is not always consistent with the gravity of the patient's condition but those early doubters were asking the thermometer to do what only they could do, that is, add up all the obtainable facts and make a diagnosis. We know that the reading of the thermometer so far as it goes is much more accurate than is the sense perception of temperature and we smile at the old physicians who doubted its accuracy.

In the years that have elapsed since that little book was published, a vast number of physical, chemical and bacteriological methods have been applied to the diagnosis of disease. These methods are lumped together and spoken of as laboratory methods. No one person could be familiar with all of them but practically all physicians make use of some of them more or less frequently. The

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more careful the physician, the more frequent the use of laboratory methods, but always with the understanding that, like thermometry, they merely add accuracy to the measurement of physical, chemical, or biological phenomena, and never supplant the trained clinical judgment of the physician. This last phrase should have been written "clinically trained judgment," because the word "clinic" bears reference to the bedside, and bedside (or office chair) observation of the patient is the only means by which the physician may develop the judgment which enables him to use in a proper way, the results of laboratory tests in diagnosis.

The little book referred to above bears on its fly leaf the name of Joseph Y. Porter, Fort Jefferson, Florida, and the date December 14, 1872. I mention this to show how prompt the first Health Officer of Florida was to avail himself of new knowledge. As late as 1884 there were plenty of physicians who "did not have any confidence in the thermometer."

### SUMMARY OF WORK DONE IN AUGUST, 1930

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	909	267	40	200	59	1475
Diphtheria .....	416	89	14	79	29	627
Typhoid .....	377	212	69	81	68	807
Malaria .....	558	279	62	16	162	1077
Rabies .....	17	2	1			20
Tuberculosis .....	187	79	7	37	12	322
Gonorrhea .....	383	187	44	90	33	737
Kahn .....	3689	1089			592	5370
Water: Count .....		57			103	3
Water: Colon .....					103	2
Milk: Bacterial Exam. ...	80	206		200	39	525
Milk: Chemical Exam. ...	135	221		280	30	666
Miscellaneous .....	173	51	14	114	19	371
	6924	2739	251	1895	456	12265
Specimen Containers Distributed .....						4721

### Biological Products Distributed

Diphtheria Antitoxin .....	10,000 units	47 Packages
	5,000 units	33 Packages
Toxin Antitoxin .....		1488 C. C.
Schick .....		404 Tests
Tetanus Antitoxin .....	20,000 units	4 Packages
	10,000 units	4 Packages
	1,500 units	1013 Packages

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Typhoid Vaccine .....	577	Treatments
Vaccine Virus .....	692	Capillaries
Antirabic Virus .....	18	Treatments
Anaerobic Virus .....	100 c. c.	9 Packages
Carbon Tetrachloride .....	781	Capsules

**SUMMARY OF WORK DONE IN SEPTEMBER, 1930**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	1108	300	55	208	28	1699
Diphtheria .....	663	117	10	283	30	1103
Typhoid .....	413	205	59	52	72	801
Malaria .....	551	244	59	24	98	976
Rabies .....	13	1	1	2		17
Tuberculosis .....	177	60	12	48	6	303
Gonorrhea .....	499	184	36	99	32	850
Kahn .....	3781	1088	12	631		5512
Water: Count .....		36		133		169
Water: Colon .....				133		133
Milk: Bacterial Exam.....	68	214	136	261	44	723
Milk: Chemical Exam. ....	111	277	143	139	17	687
Miscellaneous .....	203	54	14	155	7	433
	7587	2780	537	2168	334	13406

Specimen Containers Distributed ..... 7371

**Biological Products Distributed**

Diphtheria Antitoxin.....	10,000 units	88 Packages
	5,000 units	23 Packages
Toxin Antitoxin.....		5,135 C. C.
Schick.....		4,365 Tests
Toxoid.....		1,680 C. C.
Tetanus Antitoxin.....	20,000 units	6 Packages
	10,000 units	31 Packages
	1,500 units	1,233 Packages
Typhoid Vaccine.....		1,498 Treatments
Vaccine Virus.....		2,112 Capillaries
Antirabic Virus.....		27 Treatments
Anaerobic Virus.....	100 c. c.	1 Package
	10 c. c.	3 Packages
Carbon Tetrachloride.....		6,547 Capsules

ALL REQUESTS FOR BIOLOGICS SHOULD BE DIRECTED TO  
THE STATE LABORATORY, JACKSONVILLE, FLORIDA.

**BUREAU OF COMMUNICABLE DISEASES****F. A. Brink, M. D., Director****PREVENT PELLAGRA**

For the seven year period 1923 to 1929, inclusive, there was a continuous trend upward in the number of deaths per annum from pellagra in Florida. The number of deaths reported during the first eight months of 1930 was decidedly lower than for the same period in 1929.

Whether there is to be an increase or decrease next year will depend entirely upon the people and largely upon the breadwinners. We are wont to speak of the man who "brings home the bacon". There has been too much bacon, self-rising flour, corn meal, syrup and grits in our diet. If we want to be well and see our children develop normally, we should talk about bringing home the milk, butter, eggs, fresh lean meat, poultry, fish, fruit and vegetables for these are the pellagra-preventing foods. If every family had a cow, a garden and chickens, there would be little need to discuss this subject.

**An Economic Problem**

In many a rural home, pellagra has made its appearance after the farmer has quit the field to make his living on the road or at the mill; its prevalence increases with the advent of economic depression. These facts coincide with the other evidence pointing to deficiency of diet as the cause. Definite information about the kind of diet that is necessary to prevent and to cure must be carried to all the people. This is a medical problem and every practicing physician has a responsibility. It is his duty to join forces with the health authorities, nutritionists and agriculturists in promoting those well known dietetic measures that will prevent pellagra and at the same time improve the economic situation. Without any increased income, many families can greatly improve their table by judicious spending. To accomplish this, however, some will have to learn to place health in a place of greater importance than soda water, chewing gum, cosmetics—greater even than the petrol wagon and that which maketh the same to go.

The future growth of Florida must go hand in hand with the development of agriculture, our most important industry.

The eradication of malaria and hookworm will aid greatly in preventing pellagra. We do not know all about pellagra. Apparently, it is not "catching", is not transmitted and isolation of patients does not prevent. There may be other factors involved besides deficiency of diet but it has been proven that food and food alone will accomplish its removal. Every man, therefore, should take sufficient interest in his own continued freedom from disease to learn the rudiments of proper eating and to provide for himself and eat the foods that will protect him. Tomato juice is rich in the pellagra-preventing

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principle. Dried yeast is also of value as an adjunct to other foods but must never be used to the exclusion of a proper, balanced diet.

### The Early Signs

The most constant and usually the earliest sign of pellagra is an eruption which resembles sunburn. It appears on the hands and forearms, feet and legs, neck and face. It persists and the reddened skin turns to a dirty brown, often becoming parchment-like and scaly. These changes may be associated with, followed or preceded by weakness, nervousness and indigestion. Recurrence is frequent and is often due to falling back to the old eating habits.

For anyone who suspects the presence of any sign of pellagra the best advice the State Board of Health can give is to consult a medical doctor without delay.

The State Board of Health has a limited supply of dried yeast in two-pound packages that will be sent free to physicians for indigent pellagra patients.

### INFANTILE PARALYSIS

Ten cases of infantile paralysis, (acute anterior poliomyelitis) have been reported to the State Board of Health from January 1st to October 18th, 1930. The number of cases reported during the previous four years was as follows: 1929—33; 1928—23; 1927—39; 1926—16.

Only once during this period has there been anything approaching an epidemic and on this occasion there were 13 cases and one death in a city of about 6,000 population. This was in April and May, 1929.

Infantile paralysis always causes anxiety to the parents of young children. Though nearly all cases appear singly and the infection does not spread, it is wise at all times to know and observe the hygienic measures that will afford protection from this and other infectious diseases.

### Preventive Measures

1. Cover the face with a handkerchief or the hand when you cough or sneeze. Avoid persons who neglect to do so. Avoid loud talking and spitting.
2. Wash the hands frequently, especially before eating. Keep unclean articles and fingers away from the mouth and nose.
3. Avoid common drinking cups, eating utensils, pencils, towels, basins, toilet articles.
4. Avoid exposure, fatigue, dissipation.

IN CASE OF ANY SICKNESS isolate the patient, put him to bed and call a medical doctor.

**BUREAU OF VITAL STATISTICS****Stewart G. Thompson, D. P. H., Director****INFANT MORTALITY LOWER IN 1929**

The American Child Health Association has recently published its annual compilation of infant mortality rates in 729 cities of the United States for the year 1929. We quote from the Child Health Bulletin for September:

"The death rate among babies in 720 cities of the Birth Registration Area was about two points lower than in the preceding year, the rate for 1929 being 66.2 as against 68.3 for 1928. These rates represent the number of deaths among children under one year of age for each thousand live births. The 1929 rate is thus the second lowest rate on record for the cities of the country, the 1927 rate of 64.9 being the lowest reported."

The following tables indicate the number of deaths from certain diseases by months, for 1930 as compared with the previous year. (Provisional figures.)

**TYPHOID DEATHS**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total	Sept.	Oct.	Nov.	Dec.	Total
1930	10	5	5	3	5	8	6	7	49					
1929	2	4	6	11	8	11	13	7	62	4	6	5	6	83

**MALARIA DEATHS**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total	Sept.	Oct.	Nov.	Dec.	Total
1930	17	16	14	19	15	20	39	38	178					
1929	24	7	15	14	30	40	65	59	254	72	71	40	33	470

**DIPHTHERIA DEATHS**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total	Sept.	Oct.	Nov.	Dec.	Total
1930	6	6	4	3	3	5	2	4	33					
1929	8	6	3	3	3	1	1	8	33	10	6	6	12	67

**TUBERCULOSIS DEATHS**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total	Sept.	Oct.	Nov.	Dec.	Total
1930	84	89	101	94	92	74	85	71	690					
1929	81	109	88	85	81	76	88	82	690	71	80	87	86	1014

## BUREAU OF VITAL STATISTICS

PROVISIONAL MORTALITY FOR AUGUST, \*1930

AS COMPARED WITH SAME PERIOD PREVIOUS YEAR

International List No. (1929)	FLORIDA	NUMBER OF DEATHS					
		August, 1930			August, 1929		
		Total	White	Col.	Total	White	Col.
<b>GENERAL MORTALITY (ALL AGES)</b>							
1-200	ALL CAUSES.....	1292	737	555	1333	768	565
1-2	Typhoid .....	7	1	6	7	4	3
6	Smallpox .....	..	..	..	..	..	..
7	Measles .....	2	2	0	..	..	..
8	Scarlet fever .....	..	..	..	..	..	..
9	Whooping cough .....	7	3	4	6	4	2
10	Diphtheria .....	4	3	1	8	8	..
*11	Influenza .....	10	4	6	7	2	5
16	Acute anterior poliomyelitis .....	2	2	..	..	..	..
17	Lethargic encephalitis .....	2	2	..	..	..	..
18	Meningococcus meningitis .....	..	..	..	1	1	..
23-32	Tuberculosis—all forms .....	78	24	54	82	32	50
38	Malaria .....	42	22	20	59	31	28
45-53	Cancer—all forms .....	70	54	16	82	68	14
62	Pellagra .....	20	4	16	19	4	15
59	Diabetes mellitus .....	12	10	2	17	10	7
78-89	Diseases of the nervous system .....	142	85	57	169	95	74
82	Cerebral hemorrhage, apoplexy .....	105	67	38	112	61	51
90-103	Diseases of the circulatory system .....	188	136	52	180	126	54
90-95	Diseases of the heart .....	170	125	45	162	112	50
104-114	Diseases of the respiratory system .....	66	36	30	51	25	26
107-109	Pneumonia—all forms .....	50	28	22	40	18	22
115-129	Diseases of the digestive system .....	106	58	48	107	55	52
119	Diarrhea and enteritis (under 2 years) .....	19	6	13	16	10	6
130-139	Nonvenereal diseases genitourinary system..	141	82	59	164	96	68
130-132	Nephritis—all forms .....	120	75	45	135	77	58
140-150	The puerperal state .....	19	11	8	35	23	12
<b>INFANT MORTALITY</b>							
Number of LIVE BIRTHS		2337	1578	759	2305	1566	739
Number of STILLBIRTHS		154	67	87	140	59	81
Number of DEATHS under 1 year (all causes)....		150	79	71	131	71	60
By cause: (deaths under 1 year)							
1-44, exc. 11, 23, 32a	Infectious diseases .....	12	5	7	8	4	4
11, 23, 32a, 104-114	Respiratory diseases .....	25	15	10	9	3	6
118, 119	Gastro-intestinal diseases .....	15	5	10	9	4	5
157-161	Malformations & early inf. ....	71	47	24	83	49	34
159	Premature birth .....	37	24	13	50	29	21
160	Injury at birth .....	3	1	2	9	8	1

\* Includes delayed certificates.

# American Junior Red Cross





# HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

## STATE BOARD OF HEALTH JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921  
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

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Vol. 22

DECEMBER, 1930

No. 12

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Edited by

STEWART G. THOMPSON, D.P.H., Member  
American Medical Editors' and Authors' Assn.

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### SPECIAL ARTICLES

ANOTHER WAR? — *Brink*

LABORATORY AID — *Eaton*

TUBERCULOSIS AND HOPE — *Hanson*

TUBERCULOSIS — ALL AGES — *Thompson*

TUBERCULOSIS AND MATERNITY — *Blachly*

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**Henry Hanson, M. D., State Health Officer**

### TUBERCULOSIS AND HOPE



In attempting an article on tuberculosis one hesitates; the subject is so old that there appears to be nothing new to say. Still, there is new hope every day, both in avoiding the disease and in its arrest and cure.

What we are most interested in is prevention. Those of you who have your regular periodic examination (this should be complete when your doctor will strip you and look you over from head to foot)

will find out if you have an early lesion, (a beginning of the disease in some part of your body) which if treated promptly and right can be stopped.

Most persons who find their tuberculosis early can be cured. Such persons are of practically no danger to their associates, as far as transmitting the infection is concerned, and they have a well-founded hope of a cure.

Most individuals who have tuberculosis have contracted the infection during childhood and have knowingly or unknowingly carried on struggles with the disease in which the conflict has fluctuated, sometimes the tuberculosis gaining and again the resisting powers of the individual. These patients (sick people) have a hopeful future if they place themselves in the care of their best friend, the family physician, and follow his instructions. The family doctor really does know more about the care of sickness, and the ailments of the human body than a neighbor friend or some relative who never has studied things of this kind.

Probably eighty-five per cent of the doctors practicing medicine have been in college before entering medical school and while there they studied chemistry, physics, biology, etc., before taking up medical studies. During these studies, about two years are spent in analyzing the construction of the body and when the student finishes, he not only knows what each organ in the body looks like, but knows its correct position, the way it receives and discharges its blood supply; also, what each microscopically minute cell (of which the different parts of the body are made up) look like. These men who came from good schools can tell if you are in good physical condition. Listen to them and don't waste your time, money and hope on people who tell you that your vertebrae are out of place or that a nerve is being pinched or other claims which cannot be proven either by X-ray or legitimate laboratory tests.

The greatest menace in the spread of tuberculosis from one individual to another is the advanced pauper patient who has reached a stage of hopelessness, when by reason of this stage he is careless with

**ADMINISTRATION**

his sputum. He expectorates on the floor where children play and pick up the germs in various ways. There is very little chance that children in such families will escape infection. Cases of this type should be isolated as a precaution as much as a case of smallpox, diphtheria or scarlet fever. The open, advanced tuberculosis case is more dangerous to the public than the ordinary communicable diseases mentioned above.

**BUREAU OF COMMUNICABLE DISEASES**

**F. A. Brink, M. D., Director**

**ANOTHER WAR?**

Our hearts swell with pride when we contemplate our victories in war and we rejoice to honor our heroes of the battlefield. Likewise, we glory in the conquests of disease and exalt the victors in the hard fought battles against pestilence.

Because of the opportunity offered every citizen, great and small, to participate, the war against tuberculosis has a special place in our thoughts at this season.

Apparently, yellow fever in the United States is only a memory. From a number of states where malaria once prevailed it has now been driven out. Hookworm disease in the south is being conquered through sanitation, although much remains to be done in the way of education and stimulation to action. Parents must realize that the child's bill of rights includes protection from all avoidable health hazards.

The war against the great white plague, tuberculosis, should be waged with greater vigor. The enemy is weakening. It may well be that with increasing momentum this war will be prosecuted to a complete victory sooner than any of us now dare hope. Certainly, this happy culmination will come the sooner if all our forces, all our resources are combined to that end, just as was done in another great war of recent memory. We must overcome indolence of mind and body. Our efforts must be wisely and continuously directed toward production and distribution of the necessities and the comforts of life. The wealth of the nation should provide proper food, shelter and hygienic surroundings for every citizen. All other preventable sickness should be eliminated. Warfare against tuberculosis is more indirect than direct. The fight must be directed toward the general upbuilding of the race and reduction of all harmful or debilitating influences.

**TUBERCULOSIS\***

While tuberculosis in Florida is not so common as in most northern states, it is still an important factor in our health and should be thought of as a cause of protracted illness.

\*Prepared on request by Dr. W. A. Claxton, Field Medical Officer

**BUREAU OF COMMUNICABLE DISEASES**

During a recent series of clinics there were found in one town, out of 113 people examined, 14 cases of pulmonary tuberculosis. In another town, 77 people were examined and 11 were found to have this disease. This is not a measure of the number of people in these towns who had tuberculosis. It is an indication of the number who had the good sense to come to the clinic to be examined. Floridians are fortunate because they can live in fresh air all the year round. This lessens the possibility of infecting the rest of the family and the neighbors' children but does not mean that precautions against the spread of the disease should be relaxed.

Every individual in Florida today who has tuberculosis has acquired it through the ignorance or indifference of some one else. Where a diagnosis is made early such restrictions can be instituted as will lessen the danger of the spread of the disease and give the person affected a much greater chance of recovery. The disease is spread principally by coughing or breathing into someone else's face. This is an insanitary and disgusting habit at best and when the "cough" is laden with thousands of tuberculosis germs, it is dangerous in the extreme.

In going into the history of tuberculosis patients, we learn nearly always that in their childhood they lived in a house with a father, mother, aunt, servant or other person who died later from consumption. In this way, whole families grow up and become victims of tuberculosis. They were infected by carelessness or ignorance. The closer the contact, the greater the liability of infection.

The remedy, of course, is for the person with tuberculosis to keep away from children, to have a room to himself, to hold a piece of gauze or paper handkerchief over his mouth when he coughs, to burn all sputum that is coughed up and to have all eating utensils boiled after use.

While we must guard with all our resources against passing the disease to children, we must remember that the contacts of adults with tuberculosis patients is not nearly so dangerous. There is much unnecessary fear in this regard. Grown men and women have come to me to ask anxiously if it was safe to live in the same apartment building or in the next house to a person with tuberculosis. When we consider that physicians and nurses are in contact with tuberculosis every day in sanatoria and that a wife will nurse a husband for months or years without getting the disease, we should show less alarm when we come accidentally in contact with a person with tuberculosis. Keep the children away by all means but do not unnecessarily embarrass the tuberculous neighbor by shunning him when there is practically no danger of catching the disease. Rather go in and talk to him and brighten him up. He will appreciate it.

There are two ways by which the spread of tuberculosis can be lessened: (1) by having a competent county health unit whereby the

## BUREAU OF COMMUNICABLE DISEASES

people with tuberculosis can be taught to lead hygienic lives and can be prevented from infecting their children; (2) by the establishment of a state sanatorium where people with tuberculosis can go and be taught how to live, to get well and not to be a menace to the younger members of the household.

### Regrettable Error

The death of a number of children at Medellin, Colombia, due to the injection of diphtheria toxin instead of antitoxin is to be deplored. Such an error could scarcely be made by anyone experienced in giving these treatments, especially since the toxin and toxin-antitoxin mixtures are put up in packages quite different from those containing antitoxin. The widespread publicity given the incident may cause unnecessary fear of all preventive and curative injections and result eventually in even a larger number of unnecessary deaths. We must not forget that in Florida in 1929, there were 67 diphtheria deaths, all of which could have been prevented.

## BUREAU OF DIAGNOSTIC LABORATORIES

**Paul Eaton, M. D., D. P. H., Director**

### LABORATORY AID



The human body is so "fearfully and wonderfully made," that the diagnosis of diseased conditions is sometimes so difficult as to be impossible during life. (A post mortem diagnosis, while perhaps interesting to physicians, is the absolute zero in interest to the patient.)

Diverse causes may result in similar signs, symptoms, and lesions. The same disease may present absolutely dissimilar changes in different persons.

It is one of the triumphs of modern medicine that physical, chemical, and biological methods have been developed, which in certain obscure cases, enable the physician to assign the correct exciting cause out of a number of possible causes to a diseased condition.

Perhaps some who read this can recall the excitement that was caused by the announcement in 1881, that the causative organism of tuberculosis had been found.

Tuberculosis has been known in medical literature, since the time of Hippocrates, the "Father of Medicine". Many diseases with similar signs and symptoms have been confused with tuberculosis and a means of identifying true tuberculosis, as accurately as possible was, and is, very welcome.

Robert Koch found that the sputum of tuberculosis patients reg-

## BUREAU OF DIAGNOSTIC LABORATORIES

ularly contained small bodies which could be identified by their behavior in the presence of certain chemicals. His original method of staining the bacillus of tuberculosis was soon superseded by a better one which is still in use.

A specimen of sputum is spread out in a fairly thick layer on a glass slide and made to adhere to the slide by a gentle heating which amounts to a slight cooking of the albuminous material in the sputum.

This preparation is then flooded with a solution containing a brilliant red dye and carbolic acid and kept hot enough to steam gently for about three minutes. This treatment stains everything on the slide a vivid red. After the surplus dye has been washed off, the preparation is treated with an acid solution which bleaches the red out of everything on the slide but the tubercle bacilli. These may be recognized under very high magnification as tiny red threads looking much like short pieces of red silk thread.

Koch propounded a set of rules for establishing the causative relation between bacteria and disease.

1. The organism causing the disease must be recoverable from every case of the disease.
2. It must be capable of being obtained in "pure culture"; that is, in a culture free from other organisms.
3. This pure culture must be capable of causing the disease in question in animals not previously suffering from it.
4. It must be recoverable in pure culture from these secondary cases.

These are known as "Koch's postulates" and they have been satisfied in the process of identifying the causative organisms in a number of different diseases.

The Laboratory never makes the diagnosis. It tells the physician whether or not it finds the tubercle bacilli. The physician consciously or sub-consciously goes through this mental process:

"Here is a disease which I do not recognize. I have seen the same signs and symptoms in a number of different causes, that is to say, in a number of diseases. Aided by the laboratory I have found that the bacillus of tuberculosis is present. Therefore, I (and not the Laboratory) make the diagnosis of tuberculosis."

### FREE DISTRIBUTION OF BIOLOGICS LIMITED

At a recent meeting of the State Board of Health it was ordered that after January 1, 1931, the 1500-unit package of tetanus antitoxin should be furnished only for the indigent. This puts it on the same basis with other sera.

Diphtheria antitoxin in packages of 10,000 and 5,000 units; tetanus antitoxin in packages of 20,000, 10,000, and 1,500 units; anti-anaerobic serum (containing anti-sera for both gas bacillus and tetanus) in 100 c. c. and 10 c. c. packages; and anti-meningococcic

## BUREAU OF DIAGNOSTIC LABORATORIES

serum in packages of 30 c. c. are kept on hand and distributed for use in the treatment of indigent persons only. None of these articles may be sold by the Health Department.

Antirabic treatments, typhoid immunization, vaccine virus, toxin-antitoxin (diphtheria immunization), material for the Schick test, and carbon tetrachloride (treatment for hookworms), are furnished free to physicians without restriction as to their use. In the case of antirabic treatment, it is required that the physician administering the treatment furnish the State Board of Health with the name and address of the person to whom the treatment is administered.

The Board has designated more than forty drug stores as official Biologic Stations, but keeps stocks of diphtheria antitoxin and typhoid immunization only in these stations.

### SUMMARY OF WORK DONE DURING THE MONTH OF OCTOBER, 1930.

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites .....	2777	554	165	261	26	3783
Diphtheria .....	1759	184	56	627	59	2685
Typhoid .....	316	145	40	80	88	669
Malaria .....	441	195	38	15	142	831
Rabies .....	14	2				16
Tuberculosis .....	202	67	5	54	24	352
Gonorrhea .....	444	231	43	129	26	873
Kahn .....	3646	1501	137	549		5833
Water: Count .....		40		143		183
Water: Colon .....				143		143
Milk: Bacterial Exam. ....	166	360	294	370	58	1248
Milk: Chemical Exam. ....				174		174
Miscellaneous .....	175	55	16	403	23	672
	9940	3334	794	2948	446	17462

Specimen Containers Distributed ..... 9219

### Biological Products Distributed

Diphtheria Antitoxin .....	10,000 units	180 Packages
	5,000 units	52 Packages
Toxin Antitoxin .....		11058 C. C.
Schick .....		17160 Tests
Toxoid .....		540 C. C.
Tetanus Antitoxin .....	20,000 units	23 Packages
	10,000 units	16 Packages
	1,500 units	717 Packages
Typhoid Vaccine .....		2240 Treatments
Vaccine Virus .....		4231 Capillaries
Anaerobic Virus .....	100 c. c.	5 Packages
	10 c. c.	8 Packages
Antirabic Virus .....		16 Treatments
Carbon Tetrachloride .....		2690 Capsules

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

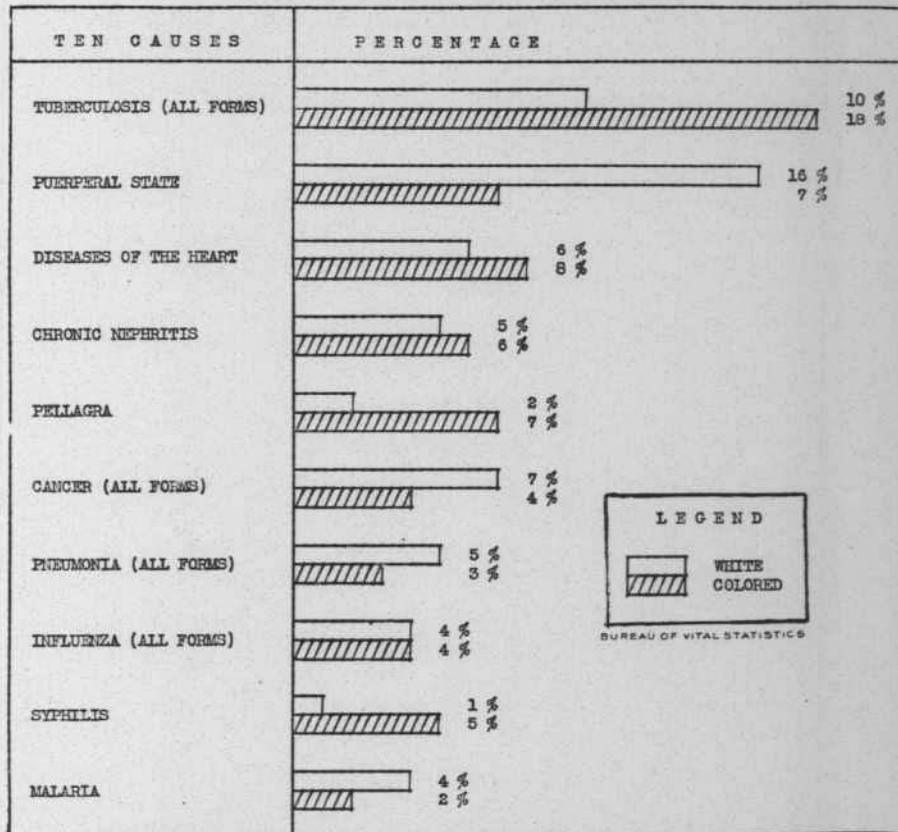
Lucile Spire Blachly, M. D., Director

## TUBERCULOSIS AND MATERNITY



It is interesting to note that of the 1,090 deaths of white women, ages 15-44, in Florida, in 1928, the chief cause of death was childbirth and causes associated with childbirth, whereas of the 1,485 deaths of colored women in the same age group, the leading cause was tuberculosis with childbirth and causes associated with childbirth, second. Tuberculosis ranks second as a cause of death among the white women of this age group.

FLORIDA  
TEN LEADING CAUSES OF DEATH AMONG FEMALES, AGES 15 - 44,  
AND PERCENT OF FEMALE DEATHS BY COLOR - 1928.



Similarly, in the deaths of white girls from 15 to 19 years of age in the same year the puerperal state appeared first with 26% and tuberculosis third with 6%, whereas among the colored girls of the

## CHILD HYGIENE AND PUBLIC HEALTH NURSING

same age group tuberculosis came first with 25% and the puerperal state second with 16%.

Tuberculosis and pregnancy make a bad combination. Tuberculosis in the nursing mother is a double menace—a menace to the mother and a menace to the baby. In most instances it can be cured if taken in time but it is much easier to prevent than it is to cure.

What should be done about it?

First. The expectant mother should have a complete physical examination as early as she knows herself to be pregnant. This should include a careful study of the chest. If the family physician himself is not especially interested or skilled in making the chest examination, he will, if requested, advise the patient to whom to go for such an examination. Take his advice; don't ask the yard man. The yard man may mean well but he is probably not in complete possession of all the facts concerning the diagnostic ability of the specialists in internal medicine. What then? Do as your doctor or your doctors advise. Don't go around boasting of the fact that they told you thus and so but you didn't do it. That may one time have been considered "smart" in polite society but in this scientific age, it is proof positive of a low I. Q.

Suppose the mother has tuberculosis and suppose she gives birth to a live baby. What then? If the mother has an open case—that is, if she is coughing and bringing up sputum—it is best, in most instances, to remove the baby from the mother at once. Get a wet nurse if possible. If not, supply artificial feeding. This is a job for a pediatrician to manage, preferably, although there are many family physicians quite interested in babies and capable of feeding them intelligently.

What about the mother? Give her every chance possible. This, in the main, is a matter of patience, rest, good food and fresh air.

What about the older children, if any? Have them all tuberculin-tested. This is much easier to do than it is to spell. It is simple, takes but little time, causes no distress, and helps a lot in determining what to do next. Ask your doctor about it.

In the older cities and communities where provision has been made to deal thus intelligently with the prevention and cure of tuberculosis, it is no unusual thing to see the members of such a family—mother, baby and older children—re-united, well and happy, after a period of time spent in "chasing the cure".

Florida is too young to have progressed far in this matter but even here there is a great deal that can be done. If you live in any of the cities call up your city health department and ask about facilities for the indigent. If you live in the country, write your State Board of Health.

**BUREAU OF VITAL STATISTICS****Stewart G. Thompson, D. P. H., Director****TUBERCULOSIS — ALL AGES**

Last year, a total of 1,014 lives was taken in Florida from tuberculosis (all forms); 416 white and 598 colored. Only twice in the past decade have fewer deaths been charged against tuberculosis in this state. In 1925, there was a total of 999 and in 1921 a total of 951, the peak having been reached in the year 1926 with a total of 1,187 deaths from this cause.

The more populous counties show larger totals. Duval County shows 173 deaths, Hillsboro County 129, Dade County 94, Gadsden County 43, and Polk County 42. Of the counties just mentioned, Hillsboro has the greatest decrease with 56 fewer deaths from this cause last year than for the previous year. Duval County is next with a decrease of 14 over the same period, Polk County third with a decrease of 13. Gadsden County shows a decrease of 1 and Dade County shows an increase of 5.

It is interesting to study the ages affected. Of the white deaths reported from tuberculosis last year, 13% fell into age group 35-39, 11% in age group 20-24, and 9% each in age groups 25-29, 30-34, and 55-59. Four other age groups show 8%, indicating less variation in the curve from age 40 to 64, inclusive. The per cent of white deaths from this cause in ages under 20 and over 70 is very small.

The distribution by age groups among the colored population varies considerably. Nineteen per cent of the white deaths from tuberculosis occurred in each of the age groups 20-24 and 25-29. The proportion among the colored differs widely from the whites in age group 15-19 as there was 12% colored as compared with 2% white in this group. The accompanying graph pictures vividly the proportion of tuberculosis deaths occurring in each age group for both races.

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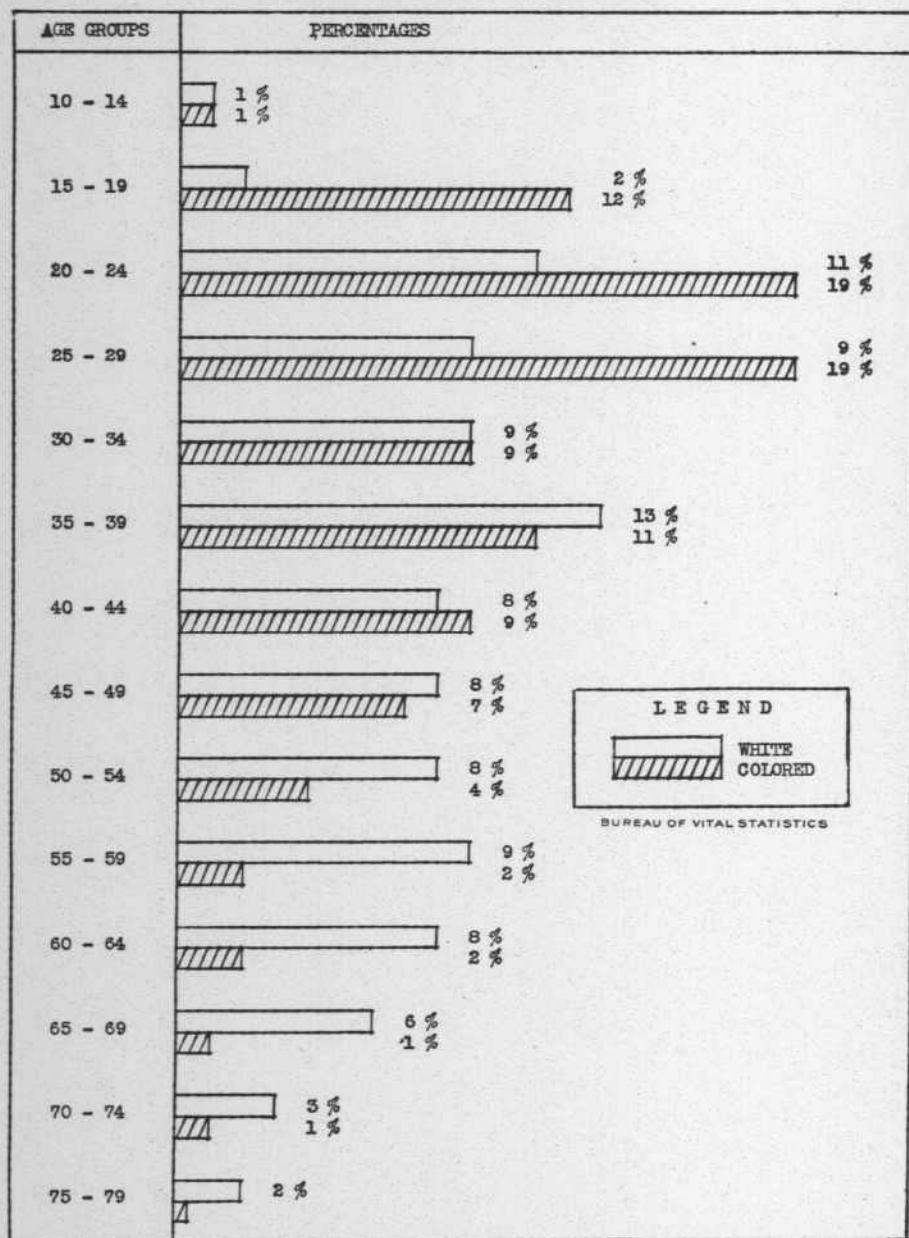
The following table indicates the number of deaths from tuberculosis (all forms) by months, for 1930 as compared with the previous year. (Provisional figures.)

**TUBERCULOSIS DEATHS**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total	Oct.	Nov.	Dec.	Total
1930	85	89	102	94	92	74	87	73	62	758				
1929	81	109	88	85	81	76	88	82	71	761	80	87	86	1014

## BUREAU OF VITAL STATISTICS

FLORIDA  
PERCENTAGE OF DEATHS FROM TUBERCULOSIS (All Forms)  
IN CERTAIN AGE GROUPS, BY COLOR - 1929.



## BUREAU OF VITAL STATISTICS

## PROVISIONAL MORTALITY FOR SEPTEMBER, \*1930

AS COMPARED WITH SAME PERIOD PREVIOUS YEAR

Inter-national List No. (1929)	FLORIDA	NUMBER OF DEATHS					
		September, 1930			September, 1929		
		Total	White	Col.	Total	White	Col.
<b>GENERAL MORTALITY (ALL AGES)</b>							
1-200	ALL CAUSES.....	1332	771	561	1322	757	565
1-2	Typhoid .....	10	3	7	4	1	3
6	Smallpox .....	—	—	—	—	—	—
7	Measles .....	—	—	—	—	—	—
8	Scarlet fever .....	—	—	—	—	—	—
9	Whooping cough .....	2	1	1	3	1	2
10	Diphtheria .....	3	2	1	10	7	3
11	Influenza .....	9	5	4	13	8	5
16	Acute anterior poliomyelitis .....	3	2	1	1	1	—
17	Lethargic encephalitis .....	—	—	—	—	—	—
18	Meningococcus meningitis .....	2	1	1	—	—	—
23-32	Tuberculosis—all forms .....	68	28	40	71	29	42
38	Malaria .....	46	27	19	72	40	32
45-53	Cancer—all forms .....	75	59	16	66	56	10
62	Pellagra .....	18	5	13	17	8	9
59	Diabetes mellitus .....	16	15	1	9	9	—
78-89	Diseases of the nervous system .....	141	78	63	128	79	49
82	Cerebral hemorrhage, apoplexy .....	117	66	51	88	53	35
90-103	Diseases of the circulatory system .....	215	137	78	178	104	74
90-95	Diseases of the heart .....	192	117	75	160	93	67
104-114	Diseases of the respiratory system .....	50	31	19	63	32	31
107-109	Pneumonia—all forms .....	32	17	15	49	26	23
115-129	Diseases of the digestive system .....	111	56	55	113	63	50
119	Diarrhea and enteritis (under 2 years) .....	19	14	5	11	6	5
130-139	Nonvenereal diseases genitourinary system..	145	90	55	152	85	67
130-132	Nephritis—all forms .....	124	79	45	125	67	58
140-150	The puerperal state .....	25	16	9	23	10	13
203 B	Automobile and motorcycle accidents.....	43	31	12	37	35	2
<b>INFANT MORTALITY</b>							
Number of LIVE BIRTHS .....		2427	1678	749	2435	1599	836
Number of STILLBIRTHS .....		160	71	89	141	64	77
Number of DEATHS under 1 year (all causes)....		128	74	54	131	72	59
By cause: (deaths under 1 year)							
1-44, exc. 11, 23, 32a	Infectious diseases .....	8	5	3	14	3	11
11, 23, 32a, 104-114	Respiratory diseases .....	9	5	4	5	2	3
118, 119	Gastro-intestinal diseases .....	13	10	3	5	1	4
157-161	Malformations & early inf. ....	73	46	27	83	55	28
159	Premature birth .....	36	26	10	43	27	16
160	Injury at birth .....	6	5	1	9	8	1

\* Includes delayed certificates.

**BUREAU OF VITAL STATISTICS**

Deaths from Tuberculosis (All forms) by Color and by Counties  
1929.

COUNTIES	DEATHS		
	Total	White	Col.
0. State.....	1014	416	598
1. Alachua.....	33	12	21
2. Baker.....	2	1	1
3. Bay.....	5	3	2
4. Bradford.....	3	1	2
5. Brevard.....	4	2	2
6. Broward.....	10	4	6
7. Calhoun.....	1	0	1
55. Charlotte.....	1	1	0
8. Citrus.....	0	0	0
9. Clay.....	3	0	3
62. Collier.....	1	1	0
10. Columbia.....	7	2	5
11. Dade.....	94	42	52
12. DeSoto.....	5	2	3
56. Dixie.....	4	2	2
13. Duval.....	173	42	131
14. Escambia.....	32	14	18
53. Flagler.....	2	1	1
15. Franklin.....	3	0	3
16. Gadsden.....	43	18	25
64. Gilchrist.....	2	2	0
57. Glades.....	0	0	0
65. Gulf.....	0	0	0
17. Hamilton.....	6	1	5
58. Hardee.....	1	1	0
63. Hendry.....	2	1	1
18. Hernando.....	2	1	1
59. Highlands.....	8	3	5
19. Hillsboro.....	129	72	57
20. Holmes.....	3	1	2
66. Indian River.....	5	3	2
21. Jackson.....	16	3	13
22. Jefferson.....	4	0	4
23. Lafayette.....	0	0	0
24. Lake.....	19	9	10
25. Lee.....	4	2	2

## BUREAU OF VITAL STATISTICS

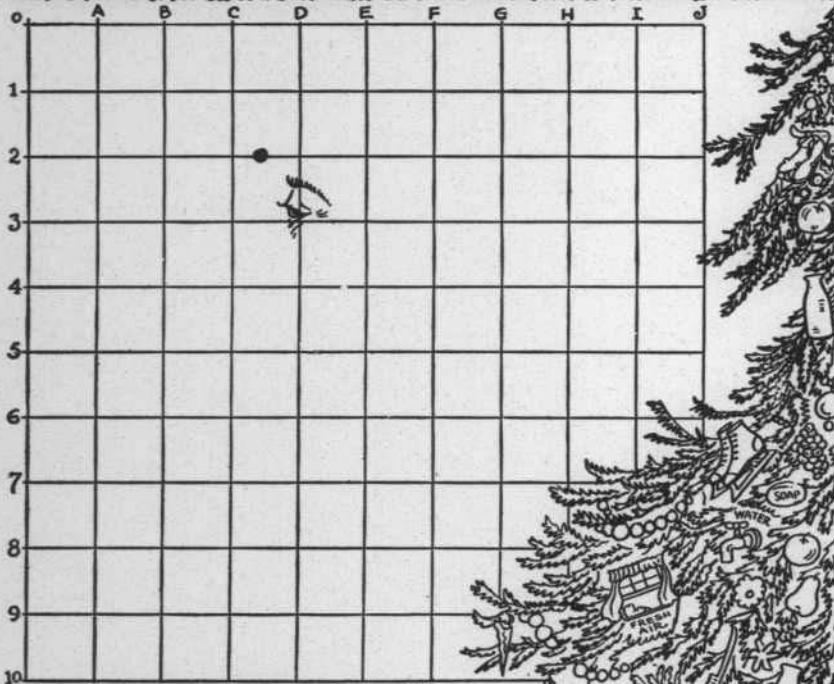
Deaths from Tuberculosis (All forms) by Color and by Counties  
1929—(Continued)

COUNTIES	DEATHS		
	Total	White	Col.
26. Leon.....	9	3	6
27. Levy.....	6	3	3
28. Liberty.....	2	0	2
29. Madison.....	9	2	7
30. Manatee.....	18	11	7
31. Marion.....	22	6	16
67. Martin.....	1	1	0
32. Monroe.....	22	14	8
33. Nassau.....	11	0	11
34. Okaloosa.....	1	1	0
54. Okeechobee.....	2	1	1
35. Orange.....	28	13	15
36. Osceola.....	16	9	7
37. Palm Beach.....	22	9	13
38. Pasco.....	11	5	6
39. Pinellas.....	31	22	9
40. Polk.....	42	17	25
41. Putnam.....	24	7	17
42. St. Johns.....	15	6	9
43. St. Lucie.....	3	2	1
44. Santa Rosa.....	7	6	1
60. Sarasota.....	9	2	7
45. Seminole.....	11	4	7
46. Sumter.....	6	2	4
47. Suwannee.....	6	3	3
48. Taylor.....	3	0	3
61. Union.....	10	0	10
49. Volusia.....	27	13	14
50. Wakulla.....	0	0	0
51. Walton.....	6	3	3
52. Washington.....	7	4	3

## TUBERCULOSIS DEATHS (All Forms) By Age—1929

Ages	1-4	5-9	10-14	15-19	20-29	30-39	40-49	50-59	60+	Unk	Total
Total	6	8	5	9	76	311	211	161	104	116	1014

# A MERRY XMAS PAGE for the CHILDREN



## A CHRISTMAS DRAWING GAME

Start drawing from the dot on Line 2 to where Lines 3 and C meet (that is 3-C) and then proceed in order of numbers given below. When finished correctly, it will be a portrait of someone we all know.

START AT DOT ~	5-B	9-E	3-H
THEN TO	5-D	8-F	5-H
3-C	5-C	6-F	5-F
3-B	6-B	5-H	4-F
4-B	8-A	2-F	4-E
4-D	9-A	1-D	3-E
5-E	9-B	1-I	2-C
4-D	8-C	2-J	1-D
4-C	9-C	3-I	DOT



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